JUNE 28, 1958
VOL. 154 — NO. 26

Telephony

THE JOURNAL OF THE TELEPHONE INDUSTRY

"TOT-A-PHONE"

Toy telephones available in two fashionable colors almost like real telephones have become part of playing house. Above is a Tenite polyethylene toy telephone with return spring in the dial and a ringing bell.

Published every week on Saturday by TELEPHONY PUBLISHING CORP., 540 S. Dearborn St., Chicago 5, Ill. Subscription $4.00 per year. Entered as second class matter at the Post Office at Chicago, Ill., under the act of Mar. 3, 1879.

Guaranteed Circulation This Issue
12,976 of Which 12,372 Is Paid

ELECTRONICS SECTION—Page 21

MANAGEMENT • PLANT • TRAFFIC • COMMERCIAL • LEGAL • ACCOUNTING

● TWIN CONTACTS...Laboratory tests prove that you get 22.7 times more reliability with dual than with single contacts. That's one reason why Stromberg-Carlson pioneered in standardizing on twin contacts throughout the XY® Dial System -- in switch wipers and relays. In addition, relay contacts are precious metal for

years and years of operation without replacement. XY Dial Systems are the only step-by-step equipment with this feature that assures you of extra reliability and service economy. It pays to "go XY Dial" when you convert your exchange to dial.

STROMBERG-CARLSON A DIVISION OF GENERAL DYNAMICS CORPORATION

ELECTRONIC AND COMMUNICATION PRODUCTS FOR HOME, INDUSTRY AND DEFENSE

FLASHES AND PLUGS

LAUNCHING SITE. A worried male voice came over the telephone at a suburban police station recently.

"I saw this guy carrying a huge rocket out of his garage," the man said. "It must have been 12 feet long."

Again the telephone rang.

"I just saw a man setting up a big rocket in his driveway," said the woman caller. "I don't think he ought to shoot that thing up by all these houses. It must be 20 feet long."

Minutes later a squad car pulled up at the home of the parson. In his driveway stood a 15-foot rocketlike device painted green and white.

"It's for my church," he told puzzled policemen. "I'm a former sheet metal worker and I made it myself out of furnace pipes.

"It's going to be set on the church lawn as an advertisement for a vacation Bible school.

"Our theme," he added, "is 'Exploring God's Wonders.' "

•

LEGAL SHOOTING. A police squad car sped to a Louisville, Ky. address recently after a telephone caller said that a man was lying in the yard shooting a rifle.

When the officers arrived they found a man lying in the yard, but he didn't have a rifle.

He had a portable television set, tuned in to "Have Gun, Will Travel."

•

HASHING IT OVER! The Wisconsin Telephone Co. gave one of its "telephone effectiveness" courses recently for the Milwaukee League of Women Voters.

During the session, the Wisconsin Bell instructor stressed the need for planning by asking, "Isn't it better to do all of your telephoning at a set time instead of sandwiching calls in between peeling potatoes and putting the coffee on the stove?"

"In the league, it's the other way around," answered the league president.

"We have to sandwich the potatoes and coffee in between phone calls."

•

SOGGY BUSINESS. Water recently oozed into a bank during a flash flood in Hopkinsville, Ky. and employes were busy getting files and records up high for protection.

The telephone rang.

A voice asked the employe who answered: "Can I float a loan?"

He didn't—at least for a while.

CHANGE OF ADDRESS

Please notify your local postmaster and the Circulation Dept. of TELEPHONY of change of address. Change cannot be made without the old as well as the new address. Allow three weeks for change of address to become effective.

Telephony

THE JOURNAL OF THE TELEPHONE INDUSTRY
Since 1904

June 28, 1958

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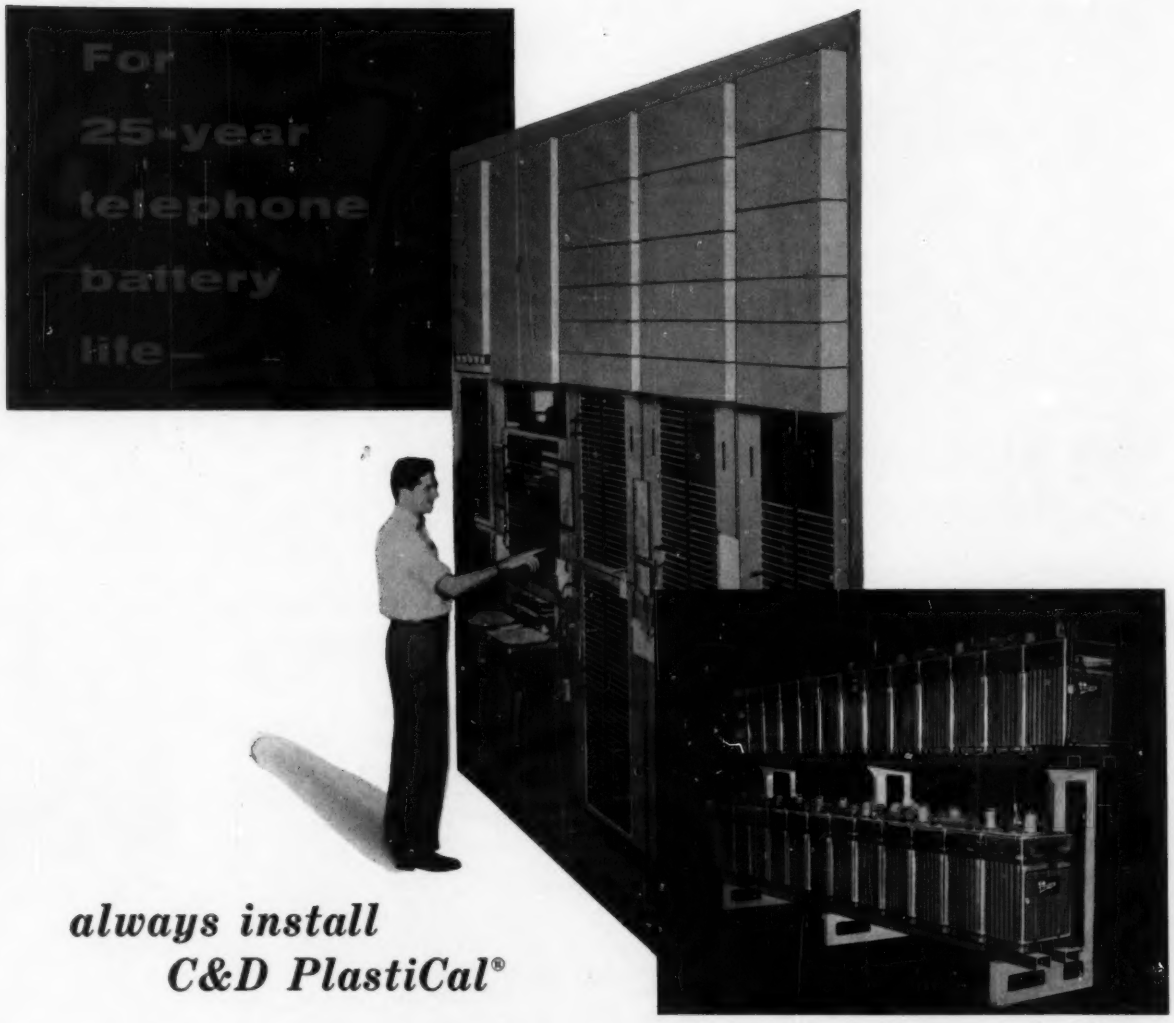
Published every week on Saturday by TELEPHONY PUBLISHING CORP., 600 S. Dearborn St., Chicago 5, Ill. Entered as second class matter at the Post Office at Chicago, Ill., under the act of Mar. 3, 1879. 25c per copy (except special issues—40c). Subscription $4.00, 1-year; $6.50, 2-years; $8.50, 3-years. Add $1.00 per year for postage to Canada and Pan American countries; $2.00 per year to Foreign countries. Telephone WAbash 2-2435.



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Why? Because C & D PlastiCal® batteries are the most advanced-design batteries of the last 50 years.

PlastiCal lead-calcium alloy grids are completely free from the harmful life-shortening effects of antimony found in conventional telephone batteries. By comparison, a C & D PlastiCal requires from 1/10th to 1/100th the current to maintain itself in a fully charged condition. Thus, frequency of water additions is drastically reduced.

A PlastiCal in the battery room means you can check the electrolyte level by glancing at the clear plastic case. Patented, exclusive C & D Saftee-Vents reduce maintenance by serving as always-ready, efficient funnels for temperature and hydrometer readings—*without* removing the vent.

If you need telephone batteries—a C & D representative or your telephone equipment supplier will be glad to explain the many advantages gained by installing C & D's premium telephone battery—PlastiCal. *Call him today!*

For details, write for descriptive Bulletin

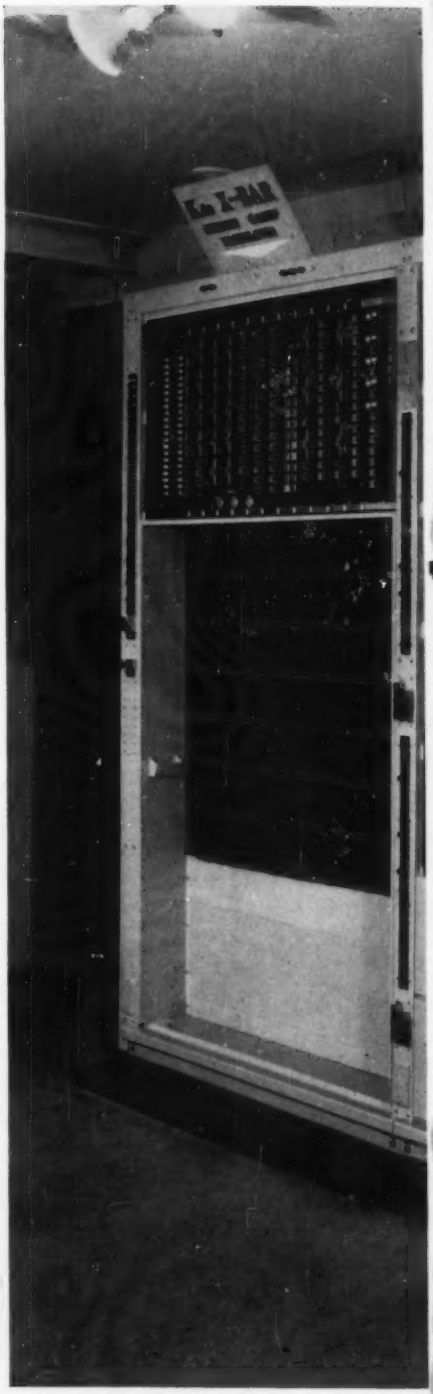
C&D BATTERIES, INC.

of Conshohocken, Pa. ... Attica, Ind.

SINCE 1906

SALES AND SERVICE OFFICES IN PRINCIPAL CITIES FROM COAST TO COAST

Manufacturers of *Slyver-Clad* ® Industrial Batteries • PLASTICELL and PLASTICAL ® Batteries for Communications, Control and Auxiliary Power



The REALLY BIG Advance in CROSSBAR SWITCHING!

"Star" of the U.S.I.T.A. Convention was the new K-60 Crossbar Switching System—the biggest advance in automatic switching for independent telephony. This new Kellogg development offers *full terminal-per-station efficiency with terminal-per-line type of equipment.* And, it can be engineered for any size system from small community dial offices to large metropolitan exchanges with maximum operational savings.

The efficiency of the new K-60 is achieved through the use of registers and full-station translator bays. The registers completely control dial selections on a stage-by-stage basis and accept up to 14 digits for nation-wide toll dialing. In the translators, subscriber assignments are made by inserting rectifiers in a matrix associated with each telephone number, thus eliminating major soldering changes on the main frame.

SOME OF THE EXCLUSIVE K-60 FEATURES

- Conversation timing by 10-line groups.
- Conversation timing on revertive calls.
- Any telephone arrangeable for joint party release, thus permitting the tracing of malicious calls.
- Detects trouble—locks trouble-path and blocks from future calls until correction is made.
- Simplified main distributing frame utilizing a 2-conductor jumper per line.
- 100% Intercept facilities.
- PBX groups may be spread over entire office—eliminating need for high traffic connector group.
- No charge assignment on specific lines such as Police and Fire.
- Toll access restriction by 10-line groups.

Call your Kellogg representative and let him show you how these and the many other features of the new K-60 Crossbar Switching System can bring new and better service to your subscribers at the minimum cost.

KELLOGG
A DIVISION OF IT&T

KELLOGG SWITCHBOARD AND SUPPLY COMPANY
A Division of International Telephone and Telegraph Corporation
6650 S. Cicero Ave., Chicago 38, Ill.
Telephone: POrtsmouth 7-6900

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HUmboldt 3-7085

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Riverside 7-5191

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Mansfield, Ohio
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Prescott 9-3610

New Addresses:

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Chicago 29, Illinois
REliance 5-7740

6100 Excelsior Blvd.
Minneapolis 16, Minnesota
WEst 9-6715 - 16

The K-60 Crossbar Switching System was introduced in this display at the U.S.I.T.A. Convention. This new unit reduces floor space requirements of previous crossbar equipment by 30%.

Among many distinguished visitors expressing interest in the new K-60 was Mr. S. A. "Gus" Lane, President of the Western Arkansas Telephone Company, Russellville, Arkansas. Mr. Lane (center) was shown the systems' many outstanding features by G. T. Scharffenberger (left), President, and W. P. Hollis, Vice President, of Kellogg Switchboard and Supply Company.

ALCOA BOOTHS NET $50,000 YEARLY

FOR NORTH FLORIDA TELEPHONE CO.

Report from C. M. Fawcett, General Plant Mgr. of North Florida Telephone Company

"I guess you'd say we're fairly young in the telephone business," says Mr. Fawcett, General Plant Manager. "We bought the existing facilities, and our organization began operating just about three years ago. We've had an increase of 102 per cent in subscribers and put in a lot of new equipment. For example, in the last two years we've installed 80 outdoor phone booths, practically all Alcoa. They certainly have gained new business for us. Last year these Alcoa Outdoor Booths brought in pretty close to $50,000.

"We prefer single-booth installations and have placed one in every rural crossroad community in our service area. They've proved to be profitable and we know they've really made a big hit with local residents. In addition, folks going to and from Florida use them a lot. Much of our outdoor revenue comes from tourists."

The North Florida Telephone Company reports that although many of its outdoor installations are in what might be considered isolated locations, there has been no vandalism experienced in the two years. The company goes on to say, "Not only are Alcoa Outdoor Booths virtually vandalproof, they're durable as well. They can't chip or fade, as have several other types we've tried."

SEND FOR FREE, FACT-FILLED BROCHURE ON ALCOA BOOTHS

Write today for your free copy of the Alcoa Outdoor Booth brochure—it contains facts and information that you should have. Ask your jobber about the increased revenue possibilities with Alcoa Booths.

Aluminum Company of America, 1690-T Alcoa Building, Pittsburgh 19, Pa.

Mr. Fawcett, General Plant Manager, makes an inspection stop at the Alcoa Outdoor Booth at beautiful Stephen Foster Memorial Park. The park is just 15 miles away from Live Oak, home of the North Florida Telephone Company. This scenic area attracts many visitors who tour its 243 wooded acres on both sides of the famous Suwannee River. The Memorial Park is the site of a museum containing Fosteriana and the new 97-bell Foster Memorial Carillon Tower. The North Florida Telephone Company, located in the seat of Suwannee County, on U. S. Highway 90 and 129 (Old Spanish Trail and Dixieland Route), serves many small communities scattered over a nine-county area.

ALCOA ALUMINUM
ALUMINUM COMPANY OF AMERICA

Your Guide to the Best in Aluminum Value

"ALCOA THEATRE"
Exciting Adventure
Alternate Monday Evenings

"We made all 80 installations ourselves," says C. M. Fawcett. "I've watched our men put some of them up; these Alcoa Booths are not only built solidly, but they're built simply, too. The assembly instructions are easy to follow and it takes only a short time to completely assemble and install one booth."

"Maintenance at 80 locations could get to be pretty expensive," says Mr. Fawcett. "But not with these Alcoa Booths. Our men just wipe them off with a little soap and water, sweep them out, and they're all set to go without attention for a couple of weeks. Our oldest Alcoa Aluminum Booths look as good as the day we bought them."

C. M. Fawcett says, "We've grown quite a bit in the last three years and we like to tell the folks what we're doing to serve them more efficiently. This Alcoa Goodwill Kit couldn't serve us better if we'd worked it up ourselves. It contains ads, publicity releases, TV and radio commercials and bill enclosures. We get a kit when we buy Alcoa Outdoor Booths."

A Double Load of Revenue

1

2

Here's the ideal answer when temporary paystation service is needed at carnivals, sporting events, civic occasions and even disaster areas where emergency service must be provided.

Now you can offer your community the newest concept in telephone service. It's the "Boothmobile"— introduced here for the first time to the Independent Telephone Industry by the folks from Leich.

Here is how it works . . . two outdoor Alcoa paystation booths are permanently mounted horizontally on a specially built trailer. When ready for use, the "Boothmobile" is moved to the desired location, then raised to an upright position with a small crank and winch that is part of the trailer. The trailer's third wheel acts as a jack for raising the two booths upright and also is a stabilizer to keep the booths from being pushed over backwards when not in use.

Another high point of the "Boothmobile" is that one man can easily operate the entire unit.

A new tandem roof by Alcoa provides a single roof cover and allows the booths to be butted together with no space between. Power and wire junction boxes are mounted to the back of the booths to facilitate quick installation. Station protectors can also be mounted to the rear of the booth and J hooks can be attached to the drawbar of the trailer which can act as the mast for both power and telephone drop wires.

The "Boothmobile" consists of the specially built trailer and two Alcoa booths. A canvas cover is available at a small additional cost. The complete unit weighs approximately 1400 lbs.

Because of its design, the "Boothmobile" is easy to move about and simple to operate, thereby making it a valuable addition to your paystation program.

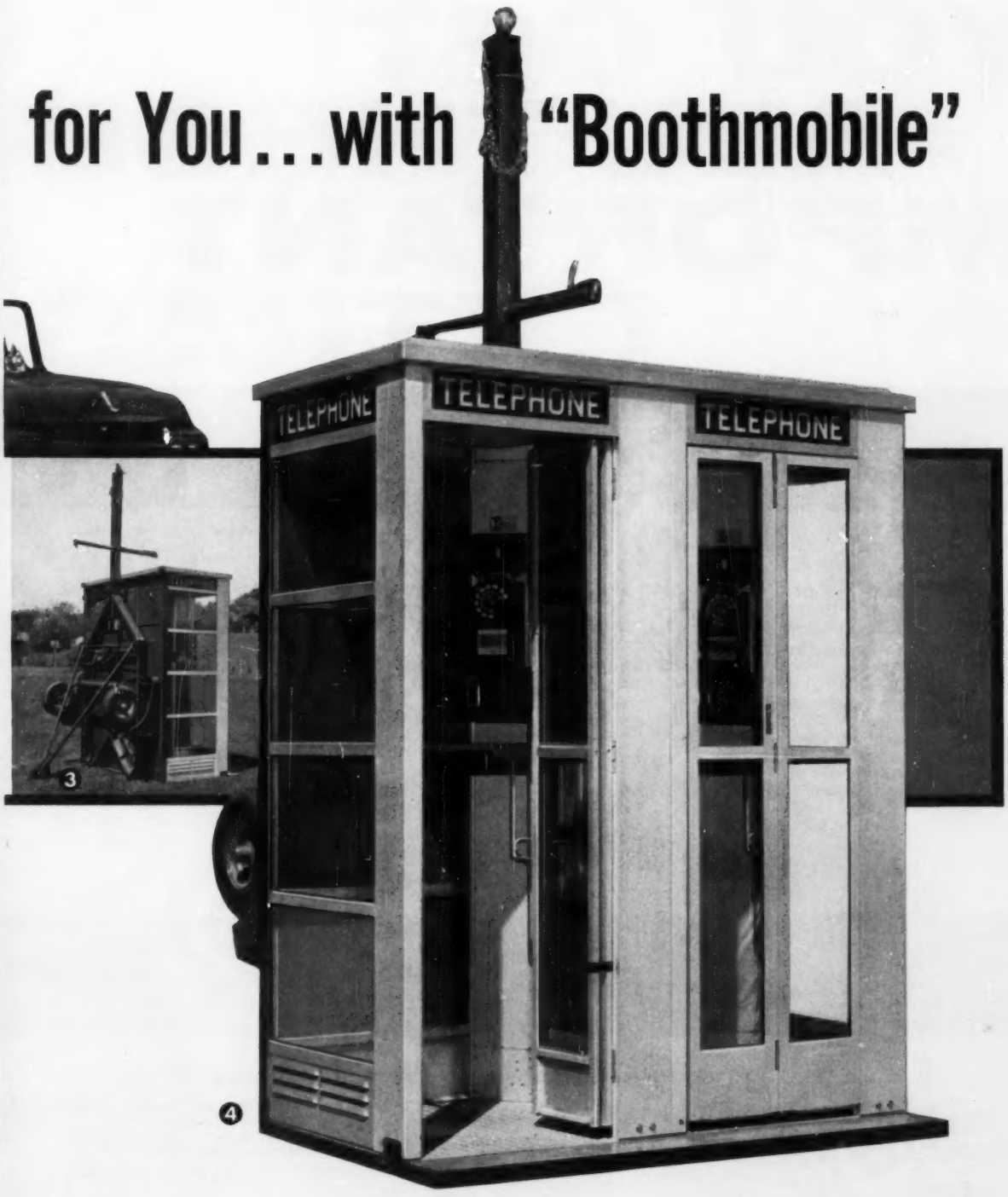
For further information and price, write now to Leich Sales Corporation, 427 W. Randolph Street, Chicago 6, Ill.

1. **Middle States Telephone Co., Des Plaines, Ill. uses the "Boothmobile" at public gatherings, athletic contests and disaster areas.**
2. **One man can easily jack the entire unit into position and get it ready for use.**
3. **The third wheel acts as a support so that booth can't be pushed over. A small front platform adds stability to the booths.**
4. **The "Boothmobile" completely installed and ready for use.**

LEICH

Subsidiary of **GENERAL TELEPHONE**

for You...with "Boothmobile"



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manufacturers of telephones, switchboards and related apparatus since 1907

YOU GET ALL THESE IMPORTANT EXTRAS

1 BETTER QUALITY
General offers you the best telephone cable in its history! You get improved grades of paper and plastic insulation. You also get lower measured capacitances and higher dielectric strengths. You'll find more built-in quality in General Cable than in any other.

2 MORE MILL CAPACITY
General Cable now has five mills making *telephone* cables in different parts of the country. These mills are needed to meet the ever increasing demands of the Independent telephone industry.

Automatic's 5 Friendly warehouses:

George Ferguson, Mgr.	"Michie" Hester, Mgr.	Ed. J. Chok, Mgr.	Fran Batcher, Mgr.	Robert Miller, Mgr.
Northlake, Illinois	2915 Moore St. Richmond 21, Va.	2360 N. W. Quimby St. Portland 10, Ore.	158 Corliss Avenue Johnson City, N. Y.	2021 Main St. Kansas City 8, Mo.
Fillmore 5-7111	ELgin 8-9280	CApital 3-7244	Binghamton 7-8507	HArrison 1-4720

when you buy General Cable from Automatic Electric!

3 BROADER PRODUCT LINE
General makes a cable for every communications need. Paper Lead, Jute Protected, Steel-Tape Armored, Stalpeth, Alpeth, Textile Insulated, Switchboard, Interior Wiring and Video Pair are all *standard* cables. And, now you can buy a telephone cable with an extruded aluminum sheath — manufactured by General — distributed by Automatic Electric. Just one more addition to the biggest selection in the industry.

4 FASTER DELIVERY
Some General Cable products are available from stock. Some are available for delivery in a maximum of 30 to 60 days. Your nearest Automatic Electric representative will do his best to get the cable you want—when you need it.

5 GREATER RESEARCH AND DEVELOPMENT FACILITIES
From General Cable's constant research come such *firsts* among independent manufacturers as Stalpeth, Alpeth, Video Pairs, extruded aluminum sheath and molded color-coded plastic switchboard cable. General has manufactured *telephone cable* for 70 years! With this vast storehouse of experience General is able to bring you the latest in cable advances.

These General Cable extras are available today for less money than ever before. Not *least* money, but *less* money. The least expensive cables often do not include all these extras. You always get the *important extras* when you buy General Cable from Automatic Electric. Send your order to your nearest A. E. representative today!

AUTOMATIC ELECTRIC

Subsidiary of **GENERAL TELEPHONE**

ESCO RINGING EQUIPMENT

MEMBER

DRIVE MOTORS

with *permanently* accurate speed regulation

In telephone ringing equipment, accurate speed regulation for the drive motors is one of the vital factors affecting equipment performance. But accurate regulation alone is not enough — it's regulation that stays accurate for the entire life of the equipment that counts.

In ESCO ringing equipment, all drive motors for DC operation incorporate speed regulators of unusually rugged design. These long-lasting regulators were originally developed to meet the strict standards for naval and marine applications where high accuracy calls for corresponding ruggedness and dependability as well. Drive motors for AC are reluctance-synchronous types to assure reliable built-in regulation over the widest fluctuations in motor loading and voltage supply. ESCO motors are built to order in every type and rating for standard and special power sources. Each incorporates the extra refinements that are the result of ESCO's forty years of experience in designing and building special rotary electrical equipment.

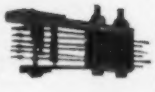
Look into the full facts on ESCO drive motors and other ringing equipment components — see for yourself why so many equipment engineers and suppliers choose ESCO — *send for free booklet today.*

Lifetime drive motors

Compact, accessible interrupters

Combination alternators

"Ready-to-go" pre-wiring



Screw adjusted pile-ups

Permanently aligned drives

ADDITIONAL ESCO FEATURES (details in future ads in this series) explain why ESCO components are included in the installations of prominent suppliers like Automatic Electric Co., Federal Telephone and Radio Corp., Kellogg Switchboard Supply Co., Leich Sales Corp., Stromberg-Carlson Co.

ELECTRIC SPECIALTY CO.
176 South Street, Stamford, Connecticut

ANSONIA
Ankoseal®
CABLES

COMPATIBILITY
QUALITY
AVAILABILITY

in rural distribution wire

In a period of change, Ansonia continues to serve you with Rural Distribution Wire which is compatible in color coding and construction with that you have used and are using. Ansonia is maintaining the quality of performance which has made our Rural Distribution Wire so popular for so many years. Ansonia stocks Rural Distribution Wire AVAILABLE FOR PROMPT DELIVERY to you.

Ansonia will continue to provide compatible wires and cables to meet your demands and at the same time will, as always, be alert to the latest innovations in the industry.

Leadership through Quality and Service

THE ANSONIA WIRE & CABLE COMPANY, ASHTON I, R.I.

Directories show more profit

when our "Revenue Men" take over

OUR DIRECTORY "Revenue Men"—working from 32 strategically located sales offices—providing the Independent Telephone Industry with a flexible and highly skilled telephone directory organization, are equipped to render a Complete and Quality Directory Service.

These specialists, through the use of up-to-the-minute knowledge of the market—proper sales training—imagination—ideas—leadership—and hard work, produce results which more than measure up to accepted directory revenue standards.

Yes, the "Yellow Pages" revenues in the more than 800 directories we now produce for large and small Independent Telephone Companies prove the statement: "DIRECTORIES SHOW MORE PROFIT WHEN OUR 'REVENUE MEN' TAKE OVER."

Write or phone our office nearest you for our Complete Directory Service Plan.

GENERAL TELEPHONE DIRECTORY COMPANY

1800 Oakton Street • DES PLAINES, ILLINOIS • VAnderbilt 4-2164

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SPRINGFIELD, Ill. • Myers Bros. Building • Tel.: 8-3425

Telling the Rate and Financial Story To Company Employes

"Every rate or financial story presents an opportunity. . . . to educate the employe on what makes the economic wheels go 'round in the company's operation, and to identify such events with his own self-interest in the company as a successful enterprise."

By FRANCIS X. WELCH*

BECAUSE MY OWN background was originally the field of law rather than editing, I have had to "double in brass," so to speak, to fill the particular demands of my own editorial work. In the process I have come to have a special appreciation for the challenging requirements of business and industrial editing. Compared with other professions the editor of a specialized publication, such as an industrial magazine, is held to a very high standard of accuracy. Everything he writes or presents is tested and judged by a wide and discriminating audience. The industrial editor must live in a gold fish bowl of technical publicity. That is a normal occupational risk which he assumes in being an editor in the first place.

Many of you have probably heard that old story about comparing the editor with other professions. I heard it this way: When an engineer makes a mistake it can often be adjusted. When a doctor makes a mistake it is generally buried. When a lawyer makes a mistake he may even charge for correcting it. But when an editor makes a mistake, it is published for the wide, wide world to see.

It is incumbent upon the editor, therefore, if he is not to make an indecent exposure of his own ignorance, to familiarize himself with the essential background of the materials and stories he has to cover.

That means playing every position on the industrial team, in a manner of speaking. For how can the editor present the viewpoint of management unless he understands it. How can he write about the work of his company's legal department or accounting department or any other specialized branch unless he finds out for himself how these departments work and what they are supposed to accomplish.

No one expects, of course, that the editor should be held to a degree of specialized knowledge comparable with those who operate these departments. But he must at least have enough over-all comprehension to do an intelligent job of news coverage. And that is certainly true of the two kinds of stories which I have been asked to discuss today—the rate case and the financial story.

An editor who attempts to write a story about a rate case, but who does not himself know exactly how a rate case works or what it is supposed to accomplish, is indeed rushing in where angels should fear to tread. Editors are expected to know all about these things as a matter of course, even by some people in management who are not themselves always as well informed as they might be or wish they were. But more about that later.

Getting down to brass tacks on the question of what we are missing in rate and financial stories, I am going to tread on some tricky ground, myself, when I suggest that some company magazine editors may not realize how much latitude and discretion they already have or how much their managements want them to have and to exercise.

I am familiar, of course, with the somewhat cynical saying that anybody who plays a house organ must remember who is paying for the music. But if we are realistic we have to admit that it is true, to some extent, in any editorial work, whether you work for the Associated Press or for a labor union. You do what the man says or else.

As a matter of fact, I have seen much less regimentation, or whatever you want to call it, on industrial publications than in many popular or so-called mass media. The sensible reason for this, of course, is that any wide-awake industrial management, which is willing to pay a first-class editor for real ability, imagination, and resourcefulness, expects to get its money's worth of those qualities. And it can only get its money's worth by letting the editor perform at his maximum potential.

I recall one actual case of a rather progressive gas utility company management which hired an editor for its employe publication out of another industrial field. After he had spent a little while familiarizing himself with gas industry personnel and other problems, and getting out one or two issues, this editor finally took up some rather detailed policy questions with his superior officer. And when the superior indicated that the editor ought to use his own judgment, the latter said: "Well, I was only looking for guidance on policy." Imagine his surprise when the superior replied: "You're not looking for guidance half as much as we were when we hired you!"

I know that no company publication editor can tell his management how

*This is an address given by Mr. Welch, our Washington editor, before the International Council of Industrial Editors, meeting on June 19 in Washington, D. C.

to run the business. But if he has ideas of his own, if he has good sound reasons for them, he may be surprised how welcome his suggestions will be received at a busy front office which has all too many problems of its own.

It may seem a little unusual to bracket the two problems of telling the story of a utility rate case and telling the story of a utility financial operation. This combination may seem unusual simply because the goals of these two respective operations may at first blush appear to face in opposite directions. The story of a rate case is the story of a company's revenue requirements. It must stress the fact that the company needs more money from the customer. The story of a financial operation is the story of investment opportunity—one which must be made attractive to prospective security buyers.

In other words, the rate case publicity must emphasize the fact that a company needs higher rates to cover its higher expenses and make ends meet. The financial publicity must stress the advantages of investment in the company, its great promise of future growth and reward for those who invest in its securities.

The rate case publicity must underline the economic *pressure* on the company. The financial publicity must paint a *bright picture* of security and reward for the investor.

On the surface, then, there might seem to be something of a conflict here —something like trying to talk out of two sides of one's mouth at the same time. Or, to put it in the vernacular, it may seem like putting on a poor mouth for one audience and giving the sales pitch to another audience.

Of course, we all know how this is in our personal affairs. When we go to sell a house, or automobile, or some other property of our own we do not always take the same line with a prospective buyer as we would, let us say, when the tax assessor drops around to check up on improvements.

But actually there is no inherent conflict here whatever. I am glad that your program committee drafted this assignment for me in such a way as to permit me to talk about these two publicity angles together, because I think they may well be discussed together. It is only when we focus our publicity sights sharply on a utility company's over-all operations that we realize that rates and financing are opposite sides of the same coin. And I do mean "coin," because in both situations the company needs more money.

In the rate case, the company's need is for more money to take care of operations. In the financial situation, the company's need is for more money to take care of capital growth and new plant. The money the company gets from its customers' rates takes care of the operations in the broad sense. The money the company gets from the investor must take care of plant investment on which operations must be based.

Co-ordination of Money Needs

Yet the two kinds of money requirements must be co-ordinated. Both are necessary to each other. If there is a failure, in one, the other is bound to suffer. Inadequate rates obviously result in making a company's securities less attractive to the investor. Inadequate financing would soon result in a plant deficiency adversely affecting the service to the customer. One hand washes the other, so to speak.

Most of you have heard, I am sure, those familiar expressions about this essential relationship between rates and financing, the "Money to Go on" and the "Money to Grow on."

The customers provide the "Money to Go on"—through the rate charges to cover current operations and other expenses, including return or profit.

The security holders provide the "Money to Grow on"—through their investment in the plant facilities.

The investors provide the tools. The customers pay for hiring the tools. It is as simple as that.

Now I do not want to disturb this picture of the equality of importance of rates and financing in your own mind by overemphasizing the rate case in my discussion this morning. But because the rate case is more complicated, and has more difficult and varied publicity angles, it requires more careful attention. Then, too, many of the ideas about editorial treatment in connection with the rate case are equally applicable to the financial operations.

So, in the interest of brevity and clarity, let us first take up the rate case and later cover what seems still uncovered in connection with company financial publicity.

Rate Case Coverage

Covering rate case publicity effectively in a company publication for employes is rather an exacting editorial chore. There is so much dependence on management for such important factors as timing, policy as to treatment, and the scope of the rate case story. Let us take up those three points in succession.

First, as to timing. The ideal handling of a rate case involves a timetable as carefully planned as the production of a theatrical performance. When, for instance, would you say a rate case starts? At the time the company files its application for a rate increase? No. I think it could be safely said that when the time comes for the actual filing of the application, most of the real work of preparation should be an accomplished fact.

In the case of a theatrical performance—to return to that analogy—the real work of preparation starts way back with the writing of the play by the authors. Then comes the hiring of the cast, and the planning of the scenic production. Thereafter, weeks or even months of rehearsal under painstaking direction are necessary to whip the actual performance into shape. All these things have to be done before the curtain goes up on the first public performance.

In a rate case, the filing of the application and the first public announcement of the company's position might be compared to ringing up the curtain on the first public performance. If the real work of preparation and planning has not been taken care of effectively before that time, there is not going to be very much of a rate case.

Rate-Case Planning

The rate case starts usually with a report or forecast of deficiencies in earnings under the present rates from the controller's office or whatever department of the company that has the responsibility for revenue requirements. This report is usually a warning that the present rates are not bringing in enough revenue to cover the cost of doing business.

By the cost of doing business I mean not only the usual operating expenses, such as payrolls and taxes and the charges for materials and supplies, maintenance, and depreciation, but also a reasonable return to the owners of the company. Remember that return is just as much a part of the cost of doing business as the conventional operating expenses.

The next step is usually to get a decision from management to go ahead with the preparation of a rate case. Then follows the meeting of the board and other formal steps needed to authorize the rate case.

At this point, a number of specialists must join in the preparation of the rate case. Someone has to work out the details of the increase and how it would be distributed over the various rate classifications. The company's attorney, the accountant, the rate engineer, and others become part of a team to build up the case to the point of final application.

Now an important part of this program is the accompanying public relations work, including publicity work which should be done to prepare the groundwork for a favorable acceptance of the eventual demand for increased rates.

This is an over-all job of cultivating public opinion in advance of the eventual request for the rate increase. The company's employes are actually a part of that public. Most of you will agree, I am sure, that a utility company has more than one public which must be cultivated.

Even within the company's customer group there are classes which require different treatment. There are the large industrial customers. Then, there are the important key figures in the community, such as newspaper editors and business and professional leaders whose sympathy or lack of sympathy could mean a great deal to the eventual success of the rate case. There are the regulatory authorities, who, it may be a surprise to some to learn, often expect to be given at least some prior intimation of a company's plans before a rate case is formally announced for the general public.

Employe Understanding

But let us confine our attention to that very important audience which is composed of company employes. Their understanding, good will, and cooperation can go a long way towards smoothing the way for public acceptance of the need for a proposed rate increase. The cultivation of public opinion, *prior to the announcement of a rate increase,* is done in various ways by different companies. But one common denominator is the planting of the idea that the company is having a hard time making both ends meet.

I recall one very well-handled rate case conducted several years ago by the transit company here in Washington. The company started its educational work six months before the actual disclosure of its application to seek a fare increase.

The company worked first through its employe publication and then the city newspapers, with a series of easily understood facts about rising operating expenses. By cartoon illustrations and short stories the employes were told very persuasively how much taxes and payrolls and equipment had gone up in cost. They were given to understand that further increased wages would necessarily depend, in large part, on the ability of the company to secure sufficient revenues to take care of operating costs.

So much for preparing the soil. Next comes the policy as to the announcement to seek a rate increase. Should the employes or any other special group be given advance information about this? Company practice varies widely and there may be good reasons for doing things differently in special circumstances.

But on the whole, I think there is much to be said for giving certain groups, especially the employes, some advance information that a rate increase is going to be requested and how much, and perhaps the basic facts justifying the proposed rate increase. It does not have to be very much in advance, perhaps as little as 24 or 48 hours. But some such consideration for the employes is appreciated and their response is inevitably favorable.

Traffic Engineering Handbook

Due to requirements for space in this issue, TELEPHONY's Traffic Engineering Handbook," by Gilbert R. Brackett, will not appear. However, the series will be resumed in the July 5 issue.

And where it is desired to give the employes some advance notice, I cannot think of a better place to do it than through the established company publication. That is the logical medium. The use of that medium in such a way tends to build up confidence and readership among the employes. It strengthens the publication as a more effective two-way means of communications between management and employes.

Where companies do not follow this policy there is often a negative reaction among the employes. We can imagine how they feel when they have to find out the most important piece of news their company has to make in the daily newspapers, or, worse yet, from their own friends and neighbors. This may well make them feel a little foolish, as if they did not know what was going on in their own company.

Of course, once such an announcement has been made to the employe group, the company cannot reasonably expect it to be kept in confidence. But if the official announcement follows soon thereafter, surely there could be little practical reason to keep the news from the employes.

As I have already indicated, there may also be good reasons to give some other groups a little tip-off on the rate case, such as the regulatory authorities or certain key business, industrial, and community leaders whose cooperation or, at least, sympathy and understanding will be helpful.

I realize that company magazine editors do not make company policies in this respect. But for what it is worth, I can tell you (and I do not mind being quoted to any utility management in the country) that I have never seen an example of adverse results where a company decided to give its employes such information in advance of the public announcement. On the contrary, I have known instances where it has helped them feel that they were part of the team and that the company's financial problems were their problems. And when you get right down to it, isn't that the truth, in final analysis?

Explaining Rate Case Objectives

After the rate case becomes a matter of public information, the company publication can fulfill a very valuable role in explaining the objectives of a rate case. It can do more. It can explain some of the objectives of rate regulation itself. It is surprising how much misinformation there is among company employes in this area.

We can expect the public at large to be misinformed or disinterested about regulation, because after all it is not the customers' immediate or personal problem whether a company is making ends meet or not. But when opinion surveys disclose that a small percentage of the company's own employes is not even aware that its rates are regulated by government agencies, such as state and federal commissions, it makes us realize that there is educational work to be done.

A test poll of employe information in this field would disclose as many as 10 per cent who are under the impression that the company makes its own rates and can charge what it pleases for its services, just like a department store or some other competitive enterprise.

Again I say that the company publication is an excellent place for reaching the rank and file who are not reached by special employe educational programs. The story of regulation is an interesting one, or it can be made so, in the hands of a resourceful editor.

Starting with such elementary facts as the difference between a regulated utility and a nonregulated business, the company publication can give a clear picture in a small number of short and simple articles about the story of regulation. The fact that the butcher, the baker, or the candlestick maker can charge what he pleases, serve whom he pleases, in any manner he pleases,

(Please turn to page 41)

Summary Report

On General's "Telephone Fair"

GENERAL Telephone Co.'s "Telephone Fair" proved to be a tremendous success, according to Joseph Van Horn, president of General Telephone Co. of Iowa (TELEPHONY, June 7, p. 57). In addition to determining that such a program can generate a sizeable increase in revenue and can create a high degree of interest in telephones, telephone service, and the telephone company, other very valuable information was obtained from the experiment.

This program proved quite conclusively to the General company that the telephone subscribers, when given an opportunity to have a particular product or service demonstrated to them and given an explanation of the various uses to which this service could be put, do develop a real interest in the service and do visualize the personal convenience that such a service would provide them. From this interest, they will frequently purchase the product or service, although only a short time before they were not even aware of its existence.

It became quite apparent to company personnel, as a result of using the technique of customer consultation and product demonstration, that General's Washington, Ia. customers were not acquainted with the services that are available. They did not visualize any assistance or convenience that this additional service might provide them until they had an opportunity to discuss their communication needs and requirements with a representative of the company, and then had the products or services demonstrated. It was found that a very high percentage of the subscribers in Washington, Ia. had never heard of a number of the General company's products and services. The Fair proved that many people were very appreciative of an opportunity to discuss their wants and needs and welcomed a recommendation from the company.

One of the many "Telephone Fair"-decorated store windows in Washington, Ia.

The objectives of the market test were to determine if telephone products or services could be sold by the use of premise solicitation, customer consultation, and product demonstration. This question, the General Telephone Company feels, can now be answered with a very definite "yes." It has been determined that the subscriber will buy new and additional telephone service, if such service is demonstrated to him, and is presented in such a manner that the customer as an individual can visualize the personal convenience that he would enjoy as a result of using the particular service.

It is vitally important that the solicitation be made on the basis of a consumer communication survey and that it not include any elements of high pressure selling, General reports. This solicitation should be a discussion between the subscriber and a qualified representative of the company, whose purpose it is to acquaint the customer with additional products and communication services.

This marketing experiment convinced the company that a program that is designed to acquaint the customer with the various products and services, that provides recommendations by telephone company personnel, and that affords product demonstration, constitutes a service that is appreciated by the subscriber. Such a program, if properly planned and carefully executed, will result in the purchase of additional telephone products and services that will mean increased revenue dollars, and will at the same time, give to the customer communication service and convenience that is tailored to his wants and needs.

The basic principles and approaches that were contained in the Washington, Ia. test are being developed for use in the other companies in the General System. It is anticipated that similar marketing and merchandising programs will be introduced in a number of these companies in the immediate future.

Shirley Escher, Washington, Ia. cashier is shown making a residence call during the telephone fair.

Following are some statistical data pertaining to the Telephone Fair:

	Number Sold
New primary service	70
Extensions	83
Regrade of service	112
Hands-free telephone (no hands)	7
Hard-of-hearing telephones	5
Electronic secretaries	11
Dial-lighted telephones	4
Dialaphone	1
Key systems	3
Gongs, horns, extra bells	20
Jacks and plugs	5
Wiring plans	2
PBX trunks	1
PBX systems	1
Switch keys	9
Transfer service	7
Directory extra listings	34

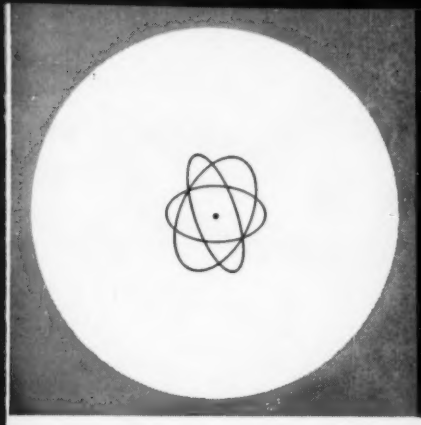
Effect on some specific services:

	Prior to test	*After test*	*Per Cent Change*
Individual lines	352	422	19.8
Four-party subscribers	1519	1413	7.5 decrease
Residence extensions	232	285	20.9

Other Statistics

Average salesman contacts per day	18
Customer contacts	1436
Sales completed	474
Trailer traffic (11 days)	3822

Sales revenue exceeded the established quota. Total additional annual revenue was equal to approximately $5.85 per primary line in service at beginning of the test.



TELEPHONY'S ELECTRONICS SECTION

BY HAROLD B. McKAY, ELECTRONICS EDITOR

PAY YOUR BILLS BY TELEPHONE

THE BANKS of the country are busily working on electronic machines which will read and process checks which are drawn on them. However, the people who dream these things up are far ahead of all this. Actually they visualize the day when cash, coins and checks will become obsolete.

According to G. M. Hunt and Patrick E. Lannan of Designers for Industry, the citizen of the future will carry an electronic pocketbook which will contain a laminated metal card. The card will contain a network of printed circuitry which will form the basis of an electronic meter, which will show the amount of money the user has to his credit. When he gets paid his wages will be posted in the pocketbook by the employer. The same machine which does the posting will be wired to a central bank clearing house, which will post a corresponding withdrawal on the company's electronic pocketbook.

The employe can then use his card to the limit of his deposits in making purchases. As he makes payments the amount spent will be withdrawn from his card. This will also be transmitted through the bank clearing house, which will deduct the amount from his account.

This system would take care of everybody except the fellow who normally pays his bills by mail; but that's all thought out too. Instead of writing a check, he will go to his telephone and dial the number of the party he wishes to pay. He will then place his electronic pocketbook into a specially designed gadget which will transmit the information in audio tones to the distant party. This would deduct the amount from his card and put it on a creditor's card. Designers for Industry is in Cleveland, O. It is a research firm specializing in the development of data processing equipment and electronic systems.

ARMY COMPUTER

THE NEW Automatic Data Processing System (ADPS), now in use by the Army can handle a procurement problem in two days, which formerly required 180 days, according to Maj. Gen. James D. O'Connell, Chief Signal Officer.

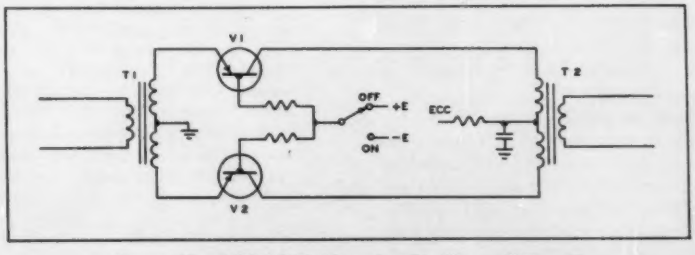
Writing in *Signal*, the journal of the Armed Forces Communications and Electronics Association, he declared that the computer, when given a requisition, will select the closest depot which can supply the items and then initiate an order for them. The ADPS system works over commercial leased lines.

ELECTRONIC SWITCH

NEW patents are constantly being issued covering improvements in electronic switching techniques. A recent development, Patent No. 2816238 issued to George Elliott and assigned to General Dynamics Corp. uses transistors for opening and closing electrical circuits.

Previous electronic switches having a configuration similar to that shown in the accompanying drawing have used diode semiconductors. Cold cathode and vacuum tubes have also been used with success. The present invention, however, claims improvements over previous circuits.

In the version shown, V1 and V2 are pnp junction transistors. When the switch S is in the "OFF" position, the transistors do not conduct because the bases are positive with respect to the emitter. When switch S is thrown from the +E to the —E position, the transistors will then conduct and close the circuit from T1 to T2. The potential source +E must be higher than the peak signal voltage which is to be blocked by the switch. The —E source must be of high enough potential to supply sufficient base current to insure that the transistors are fully conductive throughout the entire voltage swing of the signal. If no signal is present, direct current flows from ground through the transistors to a negative potential at Ecc. Ecc has an absolute value greater than the maximum peak signal voltage. Typical circuit values as given in the patent paper are 16,000 ohms each for the two resistors in the base



Patent No. 2,816,238 (Drawing by Victor Willard).

circuit and 5 volts for +E and —E, respectively.

Because of the negative voltage at Ecc the collectors are more negative than the emitters, which are connected to ground.

Another version covered in this same patent uses bilateral transistors. With this variation, the potential Ecc can be reduced to zero for ground and the circuit then works equally well in either direction.

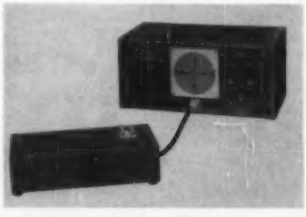
THE TELEPHONE PATCH

A RECENT issue of a national magazine had an interesting story of how Armed Forces personnel in isolated outposts could talk to the states over amateur radio and be connected by the amateur into the telephone lines and thence to the folks at home. This is accomplished by means of a gadget called the "Phone Patch," which is an arrangement for coupling an amateur radio transmitter and receiver into a telephone circuit. These are at present used by many amateurs who are regularly in communication with other amateurs at distant points. In some cases, these devices might bring additional revenue to telephone companies when a long distance call results by establishing radio communication to a point where no other telephone facilities exist.

However, there is no doubt that, in many cases, an amateur in one city might contact an amateur in another city and ask to be given a local call, which would, of course, mean a loss of revenue to telephone companies.

Most companies regard an attachment of this sort as a foreign device on their lines and are protected in their tariffs against such connections; but like the legal requirement for connecting recorders, the tariff may be easily ignored. Some difficulties can arise from the use of a "Phone Patch." Probably many of these are of non-standard construction and might possibly introduce trouble on the telephone line. This could result from improper transmit-receive arrangements, so that howling or feedback might occur. Also, the level from the amateur's receiver might be so high as to cause cross-talk on other lines. In addition, lines equipped for message registration or automatic ticketing might require a ground connection which is not provided by the "Phone Patch," and which would result in the wrong party being billed for the call.

A new factor in this issue is arising in the form of owners of radio stations which provide services to trucks or other vehicles. At present, the tariffs of some telephone companies prohibit the inter-connection of these radio systems to the telephone lines, possibly because the telephone company itself may furnish a mobile radio service.



When telephone coils like the toroids used in carriers are made, each one is checked against a standard by means of a cathode ray oscilloscope. This new Comparator makes the job simpler. If a coil is OK a dot appears at the center of the cross lines. If the "Q" of the coil changes, the dot will move up or down. If the capacitance or inductance changes, the dot will move on the horizontal axis. The instrument is made by Boonton Radio Corp., of Boonton, N. J.

Owners of some of these systems may be anxious to develop some sort of gadget for patching into the telephone lines, and some ingenius arrangements have already been discovered. In one case, the radio operator had the telephone company install a hands-free telephone near the radio apparatus. When a client would call him by telephone and ask to talk to his vehicle, the loudspeaking telephone would be placed next to the radio microphone so that the client's voice could be sent out over the air.

Another stunt involves the use of a tape-recorder. This is legitimately connected to the telephone line complete with beeper; but an extra playback head is placed on the recorder and connected to the radio. Thus the incoming voice is recorded legally and broadcast over the air a fraction of a second later.

It looks like the telephone companies will have to work fast to keep up with the electronic wiseguys.

VIBRATION

THE ROCKET age has resulted in complete new sciences being born. One of these is the science of instrumentation. Whereas, once upon a time, machinery was put together and tested by guess and by gosh, even a thing like a dirty sparkplug on an automobile engine is now located by means of a cathode ray oscilloscope. Among the branches of instrumentation is that of the testing and measuring of vibration. The Consolidated Electrodynamics Corp. of Pasadena, Cal., makes vibration pickups and transducers which operate by displacement, velocity, acceleration, torque, and some even use the principle of the seismograph.

As new instruments are developed, new uses are found for them. The day may come when vibration measurements may be standard in telephone offices. For example, much of

the noise in mechanical switching systems can be traced to vibration of the frames upon which the switching equipment is mounted. Usually, when the equipment is cleaned and adjusted properly, the vibration does not affect the transmission. However, it is possible that a reduction in vibration might reduce maintenance requirements.

RELAY ANALYZER

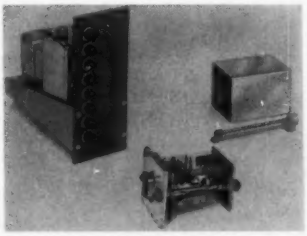
A NEW device resembling a cathode ray oscilloscope is now available for making precise analysis of relay action. It will measure exact pull-in and drop-out voltages, make and break time, contact bounce, overlap time, and contact resistance. An adapter permits different types of relays to be plugged into the front of the set. This device is manufactured by Schmeling Electronics, 20 First St., Keyport, N. J.

TELEMETER

TELEPHONE companies and other industries which have unattended plants in remote locations will be interested in a device known as the Monitron, which is a new alarm and control system. Basically, the Monitron is an electronic switch which will scan over several alarm circuits at regular intervals and report the state of them to a distant point. It is entirely electronic in action and uses transistor multivibrators to scan the circuits.

The basic unit will make a test of eight alarm circuits every two seconds. When an alarm is sounding, which is evidenced by means of a contact closure, the Monitron senses that action and reports it on a strip of lights at the distant point.

For short loops, the transmitting element can be connected directly over a telephone pair to the receiving unit, which contains the indicating lamps. But the output of the scanning unit can also be plugged into a tone transmitter and then transmitted via telephone carrier, radio, or microwave. At the receiving end, the signals would be decoded and converted back to a condition which would light lamps on the indicating panel.



This is a Monitron, a telemetering sort of device which will tell you what's going on in an unattended location. The bottom unit is an electronic rotary switch which will scan over every alarm circuit in an office every couple of seconds. What it finds out will be reported on the row of lights in the top unit which may be miles away. The two units will work together over telephone lines, radio or microwave links.

Thus, an unattended automatic exchange could have fuse alarms, high and low voltage indicators, intruder alarms, off-normal equipment conditions, or other facts about the operation reported to a distant office where personnel are on duty.

You can get a circular describing the Monitron by writing to Moore Associates, Inc., 2600 Spring St., Redwood City, Cal.

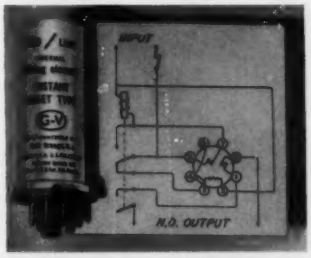
NEW FTL IDEA

THE Federal Telecommunications Laboratories, which recently proposed that earth satellites be used as relay stations for television and telephone communications, has gone itself one better.

Latest idea would improve the scatter system of microwave transmission by providing a ring of aluminum foil reflectors orbiting around the earth. The suggestion was that a satellite could be equipped with an ejecting mechanism which would shoot out a 6-inch strip of foil every fraction of a second as it revolved around the earth. This would result in a circle of aluminum "chaff" in outer space, which would be used as reflectors for radio signals. One trouble, FTL admitted, is such a metallic ring might interfere with present means of communication.

THE MEMO-SCOPE

THE cathode ray oscilloscope can be used in a wide range of electronic applications because it gives a visual representation of an electrical waveform. However, it is only useful if the user can see the trace which is produced. In some applications where the thing to be observed is of an intermittent or transient nature, a single trace may appear on the screen and vanish before it can be seen or analyzed. One method of coping with this problem has been the use of a camera, which photo-



Any telephone relay can be converted to time delay operation by means of this timing element and the circuit shown. Further information can be obtained from G-V Controls, Inc., 28 Hollywood Plaza, East Orange, N. J.

graphs the trace while it is present. Of course, this requires that film be processed and looked at later. Now, Hughes Aircraft Co. has come up with an oscilloscope with a memory. The stunt is done with a special cathode ray tube which is also a storage tube. Behind the viewing screen is a special mesh which will store the image of the electron trace until it is erased.

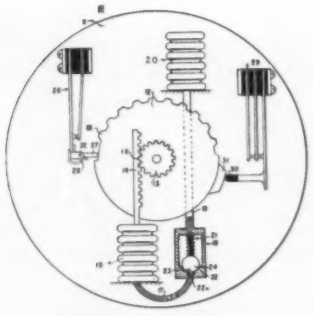
In operation, a single electrical impulse will trace its pattern upon the screen, this pattern will then "freeze" or remain on the screen after the impulse is gone. If the trace is to be used for comparison purposes, the next trace can be made to fall either next to the first trace or exactly on top of it, so that points of difference may be noted.

A principle use of the device has been in mechanical operations, like shake-table calibration and vibration analysis. However, it has also been used for trouble-shooting in data reduction systems in order to locate the source of spurious signals, which interfere with the data transmission.

Something like this may later prove of value in the telephone business for capturing an impression of the "hits" which interfere on telephone lines. If you would like to learn more about this device, write to Hughes Products, International Airport Station, Los Angeles 45, Cal.

HYDRAULIC DIAL

EVERY improvement in the telephone business nowadays doesn't necessarily use a pushbutton or a transistor. The humble dial still has room for improvement as may be seen by Patent No. 2810789 issued to Robert L. Huffman and assigned to the General Telephone Laboratories. This patent covers a dial mechanism wherein the return spring in the governor assembly has been replaced with a hydraulic device. In the accompanying illustration, 15 and



Patent No. 2,810,789.

20 are metallic bellows, which contain a fluid. When the fingerwheel (not shown) is turned, wheels 12 and 13 rotate in a counter clockwise direction. The rack 14 compresses the bellows 15, forcing the fluid up past the ball valve 24, into the upper bellows 20.

When the fingerwheel is released, the springiness of the metal in the bellows restores them to their original shape. The fluid from the expanded bellows (20) returns to the compressed bellows (15) through the bypass tube (23). The small size of this tube slows down the flow of liquid and thus controls the speed of the dial. Items (29), (30), and (31) comprise the off-normal cam and spring assembly which shorts the transmitter or operates relays as required. The finger (27) would be bent downward by the cogs (25) when the dial was being wound up; when the dial turns back with a clockwise motion, finger (27) remains rigid and rises and falls over the cogs, thus sending dial pulses from spring assembly (26). The dial can be equipped with a needle valve on the hydraulic line to regulate the speed.

NOISE RECEIVERS

ORDINARILY, radio sets are designed to receive as little noise as possible. However, some special receivers are being made for the National Bureau of Standards, which will have an opposite purpose. These receivers, being manufactured by Stromberg-Carlson, are especially designed to receive and record noise. They will be located at strategic places all around the globe as part of the activities of the International Geophysical Year.

The purpose of the activity is to better understand atmospheric noise, which interferes with radio reception.

THINGS TO WRITE FOR

THE Automatic Electric Co. of Northlake, Ill., has issued a new booklet on rotary stepping switches. It describes AE's different types of switches, basic operating circuits, and lubrication. Ask for Technical Bulletin 473. AE has also issued a new catalog on "Relays and Switches for Industrial Control," which gives technical summaries and application data for a wide variety of equipment.

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THE *BRC Notebook* is published quarterly by one of the better known makers of quality electronic measuring equipment. It contains interesting and educational information on different measurement techniques. You can get on the mailing list for this publication by writing to Editor, The Notebook, Boonton Radio Corp., Boonton, N. J.

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ANOTHER publication of interest to telephone companies is *Microwave Newsletter* published regularly by Sylvania Electric Products Inc., 100 Sylvan Road, Woburn, Mass. This publication deals with new microwave tubes and techniques.

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LITERATURE on a new crossbar switch which is useful in both telephony and television can be ob-

tained by writing to James Cunningham Son & Co., Inc., 33 Litchfield St., Rochester 8, N. Y.

•

IF YOU use switches for any purpose at all, you might get a lot of new ideas from a little book called *Micro Tips Digest*. It contains a lot of handy suggestions for uses of micro-switches. Write to Micro Switch, Freeport, Ill.

•

IN CASE you are approaching the advent of microwave in your plant, write to Eitel-McCullough, Inc., San Bruno, Cal., and ask for the 1958 edition of *Klystron Facts, Case Five*.

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IF YOU are interested in instrumentation of any sort, you should be on the mailing list for *CEC Recordings* published by the Consolidated Electro Dynamics Corp., 300 North Sierra Madre Villa, Pasadena, Cal.

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SOLDERLESS wrapped connections are now being used widely in the telephone plant. If you are not up to date on this development, write to the Gardner-Denver Co., Keller Tool Division, Grand Haven, Mich., and ask for Catalog Section 14, which describes these connections and the tools that make them.

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WHATEVER your line of business is, there are standards which govern it. The American Standards Association, 70 E. 45th St., New York 17, N. Y., has just published a new catalog and price list for the various standards that apply to American business. This contains a great many things of interest to telephone people, including building codes, electrical codes, safety codes, and many electronic standards. You ought to have a copy of this in your library.

•

IF YOU are interested in transistors for switching purposes, write to Transitron Electronic Corp., Wakefield, Mass., and ask for its literature on silicon transistors. This lists many different types of this new development and gives the operating characteristics.

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THE Lenkurt Demodulator for May 1958 contains an interesting short history of carrier systems. You can get this by writing to Lenkurt Electric Co., San Carlos, Cal.

do you use Electronic Equipment?

microwave

mobile radio

carrier

repeaters

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Cleveland Institute of Radio Electronics

4900 Euclid Ave., Desk TE-20 Cleveland 3, Ohio

today's Highlights

of finance-taxes-business trends

by Willard F. Stanley

BOND PRICES EDGE UPWARD: The 30-day period ending in mid-June witnessed a mild recovery in bond prices and, consequently, a moderate decline in interest costs on new issues of utility long-term debt. Preferred stock prices and yields showed a consistent improvement on new issues. Toward the close of this 30-day period, double "A" rated utility bond issues were marketed on a basis of a 3.8 per cent yield, against around 4 per cent for similar issues a month earlier.

The future seems to warrant moderate optimism as to the trend of bond yields for issuing utility corporations. Not long ago, President Eisenhower indicated that he would like to see the cost of money decline somewhat. Unless there is a sudden ceasing of the recession (with consequent inflation fears), it is possible that the Federal Reserve authorities may make further moves designed to alleviate money costs for borrowers.

But, these prospects are not sufficiently alluring to make it wise to defer plans for marketing forthcoming utility funded debt. Bond price movements are expected to keep within reasonable limits over the not-too-distant future, with the odds favoring somewhat cheaper money. Yields may rise in the week commencing June 16 because of the large amount (estimated to be 100 million dollars) of previous utility funded debt offerings estimated to remain undistributed at that date. But this condition should be temporary.

The Wall Street Journal tabulation of 12 new utility bond issues as of June 13 showed the average yields based on current bid prices were four decimals (0.04 per cent per annum) lower than the average of the yields on the basis of the offering prices of these securities. This is a confirmation of the improvement mentioned above.

Utilities planning to bring funded debt issues to market in the near future will be well advised to ascertain the plans of the federal government (so far as these are available to the public) as to future federal debt financing. Not long ago the Treasury surprised the financial fraternity by offering one billion dollars worth of 26-year bonds, with the result that bond prices were temporarily adversely affected, although not severely.

It is known that the treasury would like to increase the proportion of federal long-term debt and it seems likely that to accomplish this, it may try to take advantage of market conditions which it deems favorable. If this effort resulted in a large, new-money, long-term federal debt offering (say one billion dollars or

(Please turn to page 30)

Mr. Stanley, formerly a utility financial executive, is now president of Corporate Services, Inc. of New York City and is well known as a financial writer. He is a member of the Controllers Institute of America and the New York Society of Security Analysts. He serves on the Finance Management Committee and the Tax Committee of the Controllers Institute (N. Y. Control). His articles are appearing once a month in TELEPHONY.

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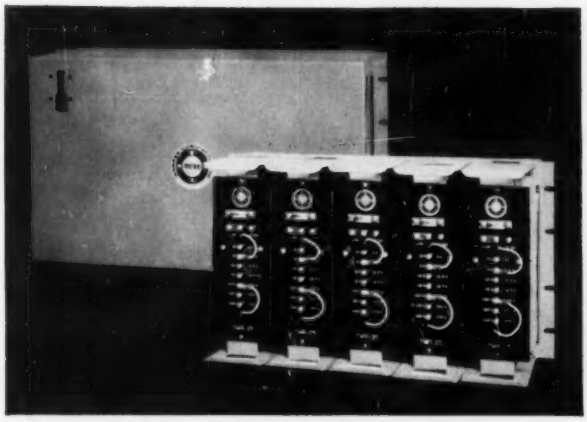

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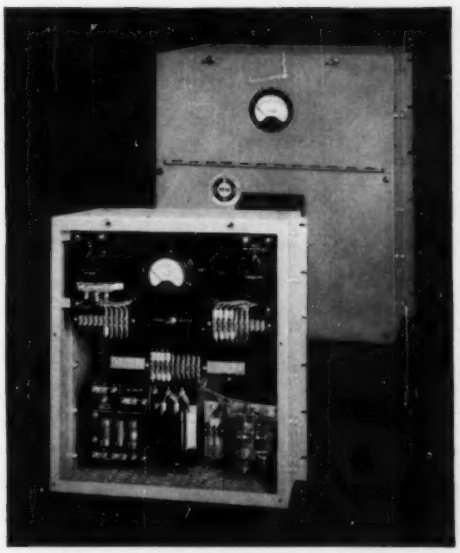

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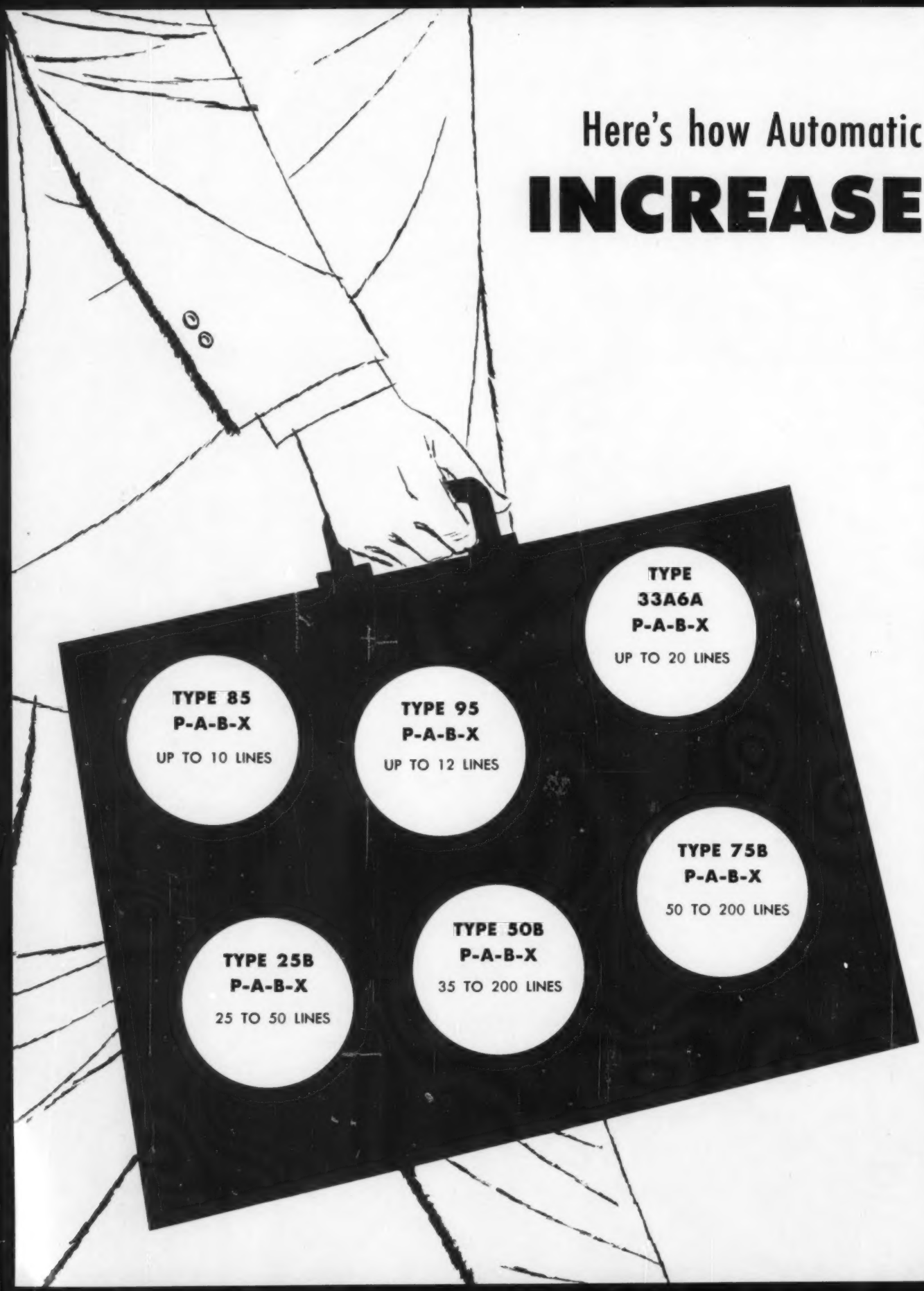
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more), it might bring about a considerable rise in interest rates, with consequent additional cost to issuers coming to market soon after such a federal offering.

Therefore, it would seem wise for utility issuers to try to schedule the marketing of the new long-term debt issues considerably before forthcoming federal debt offerings. Or, if this is not feasible, then they should try to defer the utility offerings until after the terms of the federal issues become known, and the market has had a chance to absorb any unfavorable impact of the federal financing and to return to a normal condition.

* * * *

STOCKS HIT NEW 1958 HIGHS: Despite the continued flow of adverse first quarter 1958 earning statements, the stock market up to now has been moving upward quite steadily (close of business June 17). At that date, New York Times combined 50-stock average stood at, or near, the top for the year, something over 9 per cent above the 1957 year-end figure.

Other stock "averages" show a considerably greater percentage increase for 1958. The movement in the last 30 days reflects considerable improvement over the Times average at May 20, which was 4.5 per cent above the Dec. 31 figure.

Market values of many industrial stocks loom large in relation to earnings reported for the first 1958 quarter. In many cases, the disproportion is so great as to indicate either a definite expectation of improved earnings, or an almost certain decline in the market price of these stocks. A recent analysis of stock averages by a Wall Street brokerage firm indicated that for the past 10 years, industrial stocks sold at an average of 10 times their most recent yearly earnings.

For utilities, the average for the same period was found to be 14 times. This ratio must presently be above the 10-times average for the majority of listed industrial stocks, and substantially above it, if the ratio were to be based on earnings for the first quarter of 1958 projected to reflect an annual basis.

What does the high stock-price level mean, in the face of these earnings records and statistical indices which still point toward recession in many lines? It can only mean, that in the general opinion of investors, the recession has about run its course, and better times are soon in prospect. It's axiomatic that stock market prices don't reflect current earnings or values but reflect, rather, the better or worse times anticipated for the near future. This is called "discounting" the future and the market now seems to be predicting a considerable improvement in earnings and business activity generally in bidding stocks up to recent high levels.

For the first time, there are portents indicating that the recession may be subsiding. For example, May employment figures were the first break in a doleful procession. On a seasonal basis, they showed a marked improvement. This may be an important straw showing the wind has veered.

Another important and favorable point, is the recently announced increase in the level of industrial production—the first in eight months. Also, many leading business men and economists have recently reflected at least guarded optimism as to business trends in the near future. Eastern rail officials still radiate pessimism, pointing to the continued decline in their carloadings, but, in other areas, notably the Southwest, the railroads are beginning to report improved business, aided by a bumper wheat crop. All in all, there is considerable evidence that a turn for the better may be at hand.

There are still many stocks, notably among the utilities, which may well prove attractive investments at present market levels. Many of the chain food stores, and tobacco and packing companies have shown improvement in earnings throughout the recession, against the general trend. Selective purchases can still prove profitable even at the relatively high average price levels prevailing. But, the times surely warrant careful scrutiny of existing, as well as new, investments. Holders of stock in companies with drastically declining earnings, whose market price has not yet fallen commensurately, might be profitably switched to issues of companies whose business is still trending upward and whose prices reflect more reasonable relations to current and prospective earnings.

Obituaries

ALVIN J. BOHNSACK, 66, president of the Germantown (N. Y.) Telephone Co. died on June 17. His death was due to a blood clot which developed in his lungs as a result of injuries he sustained in an accident on May 16. Mr. Bohnsack was struck on that day by a falling timber during the demolition of a building. He suffered fractured ribs, severe pelvic injuries, and multiple lacerations of the head and face.

A. J. BOHNSACK

Born in Hillsboro, N. D., Mr. Bohnsack was the son of the late Charles and Hilda Krienke Bohnsack. His family was one of the pioneering families of the West.

Mr. Bohnsack was a member of the Independent Telephone Pioneer Association.

He is survived by his wife, the former Lovina Hardy; a daughter, Mrs. Warren Leipshutz; two sons, Donald and Warren Bohnsack of Germantown; a brother, Louis Bohnsack of Fargo, N. D., and two sisters, Dr. Eleanor Crim of Fargo and Miss Freida Bohnsack of Sheldon, N. D.

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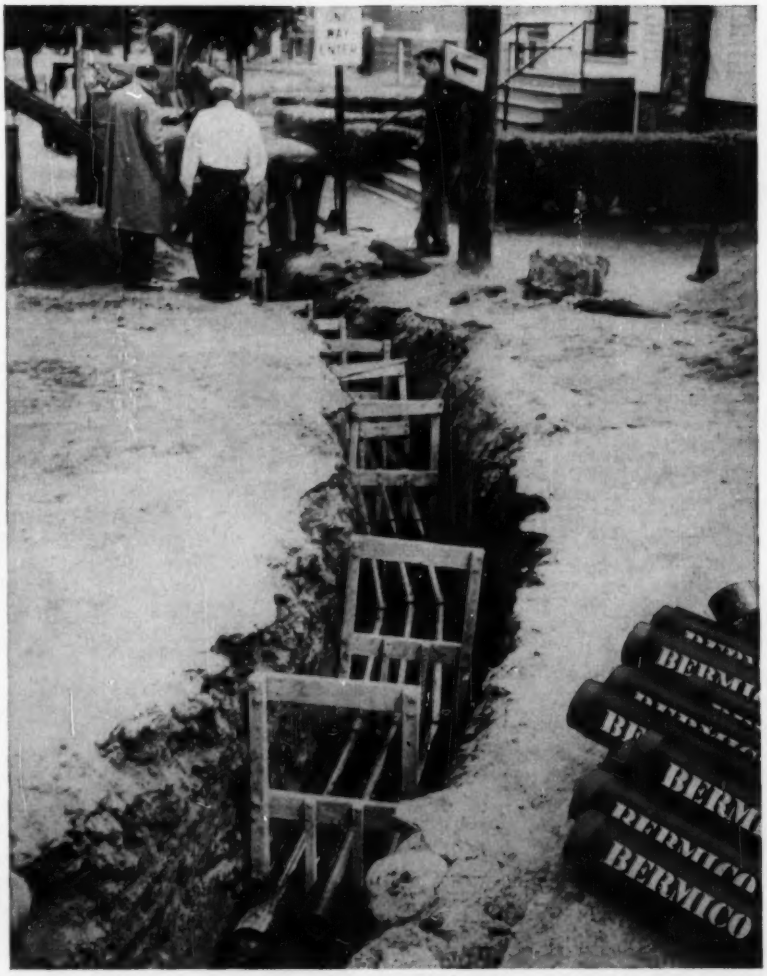
MARCO AURELIO ANDRADA, 54, secretary-general of the International Telecommunications Union (ITU) died on June 18 of a heart attack. The ITU, a United Nations Agency, coordinates the radio, telegraph, and telephone policies of its 92 member states.

Mr. Andrada, an Argentine citizen, was formerly director-general of his country's ministry of communications. He took office as head of the UN agency in 1954.

Knowledge Remains

"To appreciate the noble is a gain which can never be torn from us."—GOETHE.



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THE Plant Man's Notebook

BY RAY BLAIN, TECHNICAL EDITORIAL DIRECTOR

THE Bell System is furnishing more service despite the general slowing down of the economy, President Frederick R. Kappel informed more than 2,500 share owners at the annual meeting recently. Since last September, when the business decline started, more than 1.4 million telephones have been added to the Bell System and the number of conversations handled have increased more than 5 million a day. This increase in business is expected to continue to increase as 1958 progresses.

During the last 30 years, the number of Bell telephones has increased from about 13 million to more than 52 million. In this period, the system's employes have increased from 350,000 to about 770,000.

President Kappel states that this has been made possible by the development of better equipment, better tools, and improved operating methods. These reflect management leadership, effective research, careful training, and the exercise of American ingenuity by countless telephone men and women. Mr. Kappel cited some examples of improvement as follows:

The average time required by a particular group of information operators to look up numbers requested by telephone users was 37.6 seconds. After these operators had received instruction in rapid reading, this average time was reduced to 33.7 seconds and later to 33.3 seconds. If these improvements were made throughout the Bell System, it is estimated that it would save about 8 million dollars a year.

Last year, Bell cable splicers made more than 300 million splices in cable conductors. For years these splices have been made by stripping the insulation, twisting the wires together, and slipping a cotton sleeve over the joint. The new method is to slip a copper sleeve with a plastic jacket over the ends of the wire which are to be connected. Then a pneumatic tool forces little points in the sleeve right through the insulation to make contact with the wire. There is no need to remove the insulation nor to twist the wires. It is estimated that for each 100 million joints, this method will save about 1½ million dollars a year.

A new method proposed by a telephone man enables one man to identify the pairs he is working on without the aid of a helper.

Another new method of sweeping with a treated cloth is saving about one million dollars annually.

A new machine that fashions the ends of cords so that they can be firmly connected to the telephone instrument does the work for about 2½ cents a cord less than the method formerly employed. Since the Bell System uses about 18 million cords annually, the saving comes to $450,000.

In the wiring of central office apparatus, a wire-wrapping gun fastens wires to the terminals of dial equipment so tightly that soldering is not required. Hence, the cost of this operation is materially reduced.

A new centralized testing system has cut as much as three weeks from the time required for testing a new central office. This permits a saving of hundreds of thousands of dollars a year.

The use of machines that automatically perform routine clerical duties and computers that store and analyze information, is increasing. The Bell System is presently working toward integrating all of its operations through the use of interconnected computer systems.

In the years to come, they expect that these will not only aid them in providing service more effectively from day to day, but that they will also assist in analyzing market conditions —determining what new equipment is required—engineering the equipment in detail—procuring the necessary material—and forecasting the manufacturing facilities and the number of people required to produce the equipment that future service will require.

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It has been reported that an information operator out on the West Coast the other day received a request from a customer for the number of a funeral parlor that gave green stamps.

Unusual calls are nothing new to information operators, but it is the increasing number of "routine" queries that are causing concern. These calls are for numbers that are listed plainly in the telephone directory if customers would only look them up. These customers find it much easier, however, to call information than to fumble through the small print of our cumbersome present-day telephone directories.

We understand that customers are continually requesting the numbers of large business establishments and department stores from information operators in many of our large cities. It is stated that even the telephone company rates about 200 calls to information a day in San Francisco alone. A recent survey in this city indicated that information handled some 250 requests each day for the numbers of the Pacific Gas & Electric Co. and the Bank of America. Air lines and railroads also ranked high on the list of queries.

We often speculate on just how this increasing information load will be handled economically in the future. Since we have mechanized just about everything else, it would seem possible that information will also at some future period be dispensed by a machine.

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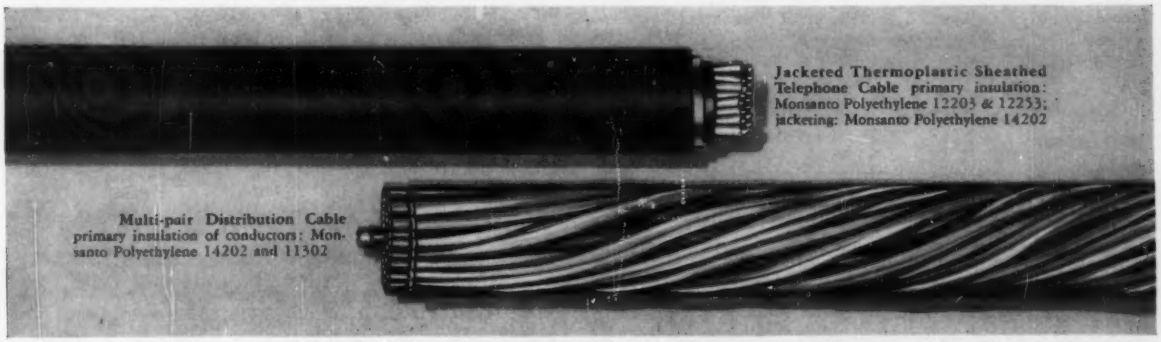
We note with interest that the lowly guy guard has at last been changed. It has been tapered which gives it a more pleasing appearance.

This design also provides a large cross-section where it is needed, at the lower end, to effectively cover clamps or other guy termination arrangements and the anchor rod eye.

THE MESSAGE IS: MONSANTO



Jacketed Thermoplastic Sheathed Telephone Cable primary insulation: Monsanto Polyethylene 12203 & 12253; jacketing: Monsanto Polyethylene 14202

Multi-pair Distribution Cable primary insulation of conductors: Monsanto Polyethylene 14202 and 11302

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Courts and Commissions

Utility Pole Relocation Law Tested in Idaho

A Boise, Idaho District Court hearing of an action brought by the state against the Mountain States Telephone & Telegraph Co. and the Idaho Power Co. to test the constitutionality of a law passed by the last session of the Idaho Legislature was to have been heard on June 5.

The case is a test of the law requiring the state to reimburse utility companies for the costs of moving, utility poles and other facilities in connection with what was described as highway maintenance work.

The state and the Idaho Board of Highway Directors maintain that such payment would be in violation of article seven, section 17 of the Idaho Constitution which provides in part that no money designated for highway purposes may be used for any other purpose.

Tom F. Alworth, who petitioned the district court to appear as a "friend of the court" as a representative of the Rural Electric Co. and the Project Mutual Telephone Cooperative Association, Rupert was given leave by District Judge Marlin S. Young to file briefs and take part in oral arguments.

The Project Mutual serves about 2700 stations.

Brothers Sell Ore. Company To United Utilities

D. O. Hood and Ernest R. Hood, principal owners and managers of Columbia Utilities Co., Medford, Ore., on June 18 announced sale of their telephone system to United Utilities, Incorporated.

Columbia Utilities Co. and its wholly-owned subsidiary, California-Oregon Telephone Co., presently serve about 5,000 telephones and operate an extensive toll network in Oregon and California with headquarters in Medford.

Service is provided through 12 automatic exchanges located in prosperous and growing regions, including Crater Lake National Park.

United Utilities, Inc., with headquarters in Kansas City, Mo., is managed by Alden L. Hart, president and general manager. The United System is furnishing telephone service, electric power, gas, water and propane services in portions of 15 states.

Two Minn. Independents Get Increases For EAS

The Benton Cooperative Telephone Co., Rice, on May 26 was granted approval by the Minnesota Railroad & Warehouse Commission for increased rates at its Rice exchange, from which the company provides extended area service (EAS) to the St. Cloud exchange of the Northwestern Bell Telephone Co.

The Rice exchange serves 113 local and 402 rural stations. With extended area service to St. Cloud, an estimated 14,000 additional stations will be callable from the Rice exchange.

The increase will raise the company's net operating revenues from $34,591 to $38,225. Total expenses will also increase from $27,479 to $31,530. Therefore, this will then decrease the company's net income to $6,695 from $7,112, representing a 2.21 per cent return on a rate base of $302,756.

The old net rates and the new net rates including EAS to St. Cloud at the the Rice exchange are:

	Old	*New*
One-party business	$6.00	$7.00
Two-party business	5.00	6.00
Multi-party rural business	5.00	6.00
One-party residence	5.25	5.50
Two-party residence	4.75	5.00
Four-party residence	4.25	4.50
Multi-party rural residence	4.25	4.50

•

Also in Minnesota, the commission on June 2 approved interim and future automatic rates with EAS for the Chisago City Telephone Co.

The company requested an interim manual rate for its Center City exchange to provide for operators' wage increases to conform with wages now being paid at the company's Lindstrom and Chisago City exchanges.

Conversions to automatic operation have been scheduled by the company for its exchanges as follows: Wyoming, Sept. 7, 1958; Chisago City, Oct. 19, 1958; Lindstrom, Dec. 7, 1958; and Almelund in mid-1959 when the Center City exchange will be discontinued and stations not served by Almelund will be connected to Lindstrom. The Stacy exchange has already been converted to automatic operation.

After conversion of the company's exchanges, extended area service will then be provided between Wyoming and Chisago City, Wyoming and Lindstrom, Chisago City and Lindstrom, Almelund and Lindstrom, and Wyoming and the Forest Lake exchange of the Northwestern Bell Telephone Co.

The Chisago City Telephone Co. serves 1,077 local and 1,201 rural stations.

The company's net operating revenue under the interim rates will be raised from $83,580 to $88,093 and to $145,543 under the approved automatic rates.

Total expenses under the interim rates will increase from $86,871 to $92,076 and to $106,998 under the automatic rates. This represents a change upward from deficits of $3,291 (original rates) to $3,983 under the interim rates and to a net income of $38,545 under the rates for automatic service with EAS.

With automatic service, the company's rate base will have increased from $163,722 to $831,715, the rate of return being 4.64 per cent on this increased investment.

The old gross rates and new net rates for manual service at Center City (including Almelund) are as follows:

	Old	*New*
One-party business	$4.75*	$7.20*
Two-party business	4.00	6.25
Multi-party rural business	4.00#	4.85
One-party residence	3.50*	3.60*
Two-party residence	3.00	2.85
Four-party residence	2.50	2.45
Multi-party rural residence, 12 or less per line	3.25#	3.40
Multi-party rural residence, 13 or more per line	2.75#	2.90

*An additional charge of 50c per month for common battery service, if desired.

#An additional charge of 25 cents per month for a handset instrument, subject to 24 month limitation.

(Please turn to page 36)

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Net automatic rates and approved automatic rates with EAS for Center City, Almelund, Wyoming and Stacy are as follows:

	Present Wyoming	*Present Stacy*	*Approved** (1)*	*Approved (2)*
One-party business	$7.25	$7.75	$8.60	$9.10
Two-party business	6.25	6.75	7.50	8.00
Multi-party rural business	6.00	—	6.00	6.00
One-party residence	4.75	5.25	5.00	5.50
Two-party residence	4.25	4.75	4.25	4.75
Four-party residence	3.75	4.25	3.75	4.25
Multi-party rural residence	4.25	4.25	4.25	4.25

(1) Center City, Almelund, and Wyoming; (2) Stacy.

**Lindstrom rates for automatic service authorized previously are identical to those proposed for Center City, Almelund, and Wyoming.

Eight Companies Seek, Get Ind. Commission OK's

The Indiana Public Service Commission in recent actions granted the following petitions:

The Sunman Telephone Co., Inc., was authorized to increase rates at its Napoleon exchange when the exchange is converted to automatic operation. The Sunman company was also permitted to borrow $100,000 at 6 per cent payable in 20 years and to issue 60 shares of common capital stock at $125 per share.

The Eastern Indiana Telephone Co., Winchester, was granted a permanent rate increase on June 13 (TELEPHONY, Mar. 29, p. 44).

The Northwestern Indiana Telephone Co., Inc., Hebron, was authorized to borrow $70,000 at 6 per cent repayable in 20 years, and to use the proceeds for new equipment.

The Princeton Telephone Co. was allowed to issue $175,000 worth of first mortgage 5 per cent bonds.

•

The Indiana commission also received the following petitions:

The Battleground Telephone Co., Inc., asked to increase its rates on conversion to automatic operation. It also requested permission to borrow $65,000 through the issuance of first mortgage notes. The Battleground company also requested authorization to issue 150 shares of no par common stock.

The Perry-Spencer Rural Telephone Co-op, Inc., asked approval to incorporate and to purchase the Holland Telephone Co., Inc., and the Stendal Home Telephone Co. It also asked to serve additional territory and to effect rates within that territory.

The Midwest Telephone Corp., Petersburg, requested permission to issue $600,000 principal amount 5 per cent first mortgage bonds. The bonds are to be due May 1, 1978.

The Bremen Telephone Corp. requested permission to issue and sell a $190,000 principal amount first mortgage note, proceeds to be used for construction and improvement.

Telephone Company in N. C. Given Interim Rate Raise

The Morris Telephone Co. of Roxboro, which serves 5,300 subscribers, was granted an interim rate increase on June 18 by the North Carolina Public Utilities Commission pending final rate adjustments to be made at the end of the year (TELEPHONY, May 10, p. 44).

The increase will become effective July 1 and will continue through Dec. 31 when commission accountants will establish a permanent rate schedule after examining the company's books.

The company, which also was granted permission to discontinue free and discount toll service between its Yanceyville exchange and Danville, Va., has launched an extensive expansion program and recently asked the commission for permission to increase its rates.

It said its current rates have failed to yield revenues sufficient to earn a reasonable rate of return on its investment and asked that its rates be increased to permit such a reasonable return.

The interim rates approved by the commission will bring in an estimated $40,000 additional annually. The commission said it agreed that a small telephone company with a big expansion program faces a difficult financial problem and agreed also that the company does not now earn a fair rate of return. It said, however, that it is unable to say what return the company would realize after the improvement program is completed.

Stock OK Requested in N. Y.

The New York Public Service Commission was scheduled on June 16 to hear a petition of General Telephone Co. of Upstate New York, Inc., Johnstown, for authority to issue 22,000 shares of no par common stock to realize $1,100,000.

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MULTIPLE TERMINAL BOX
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Designed to accept as many as four type 44 terminal blocks, Wiremold's new 2644T Multiple Terminal Box permits Planned Telephone Systems *without attaching fittings to office furniture.* Installation is easy—no new tricks or special equipment are needed. It can be hooked up to any overfloor system—and it's used with underfloor systems as well.

For a trip proof cable system, 2600 Pancake® is the flattest overfloor duct made. It's strong as a bridge, and easy to install with a few simple fittings.

Wiremold developed the first single terminal box for overfloor applications, and again is first with the multiple terminal box. For full information about these Wiremold developments, write:

THE WIREMOLD® COMPANY
HARTFORD 10, CONNECTICUT

OK Purchases, Financing For 4 Ill. Companies

The Illinois Commerce Commission recently approved the following petitions:

A & G Telephone Co., Farina, was authorized to purchase the Watson Telephone Co. (TELEPHONY, Mar. 30, 1957, p. 43). Incorporators of the A & G company, Mr. and Mrs. Paul Allen and Mr. and Mrs. James W. Green, plan to convert the Watson exchange to automatic operation. The A & G company was also permitted to sell $75,000 worth of notes to the Stromberg-Carlson Co., a division of General Dynamics Corp. The notes are payable in 240 consecutive equal monthly installments.

The Prairie Hill Telephone Co., Altamont, was authorized to purchase the Watson & Gilmore Rural Telephone Co., Gilmore, the St. James Telephone Co., and the St. Peter Telephone Co. The Prairie Hill company was also allowed to issue 1,375 shares of $10 par common stock. The money is to be used for construction and the acquisition of the above three companies.

The Morrison Telephone Co. was allowed to issue 3,000 shares of common stock at $25 par value (TELEPHONY, Apr. 26, p. 96). The stock is to be issued as a stock dividend to be distributed pro rata to holders of common stock on the basis of one for four shares outstanding. This will represent capitalization of surplus earnings amounting to $75,000, which have been invested in company property. The purpose of the stock issue is to reimburse the company for moneys actually expended from income for acquisition of property or for construction.

The Midland Telephone Co. was authorized to purchase the Dorchester Telephone Co. (TELEPHONY, Mar. 29, p. 42).

Deny Rate Increase To Utah Independent

The Midland Telephone Co., Moab, on June 12 was denied a rate increase by the Utah Public Service Commission (TELEPHONY, Mar. 22, p. 42).

The commission fixed the company's rate base at $633,643. On this base, the commission said the company's net income for 1957 was $52,319, representing a rate of return of 8.26 per cent.

The company brought out the fact that approximately 20 per cent of its stations are in temporary housing, such as house trailers—which indicates a potentially volatile type of subscribership.

"Under the circumstances," the commission maintained, "it would be improper to allow higher rates for services today to offset a possible loss of revenue at an uncertain time in the future which may or may not materialize."

The company's toll revenues have increased from $47,909 in 1952 to $275,026 in 1957. Its exchange revenues increased from $28,601 to $85,347 in the same period, the commission found.

Cal. Company Asks Stock OK

California Water & Telephone Co., Monrovia, has asked the California Public Utilities Commission for authority to issue and sell 200,000 shares (5 million dollars) of $1.25 dividend convertible preferred stock of $25 par, it was reported on June 15. A syndicate led by Blyth & Co. will purchase the issue at $23.25 a share, the application stated in a request for exemption from competitive bidding.

Ill. Company Buys Exchange

On June 10 the McDonough (Ill.) Telephone Cooperative purchased the Colusa Telephone Exchange, according to Evan H. Paul, Colusa Exchange manager.

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in Proven performance internationally—from Vancouver to Cuba, from California to Maine. Phone or write for THE FACTS to learn why no other small outdoor coin telephone booth is used so extensively. Get REVENUE RESULTS, 8 page INSTALLATION INSTRUCTIONS, 10 page HOW TO LOCATE MORE REVENUE and LIST OF CITIES WHERE BOOTHETTES INSTALLED.

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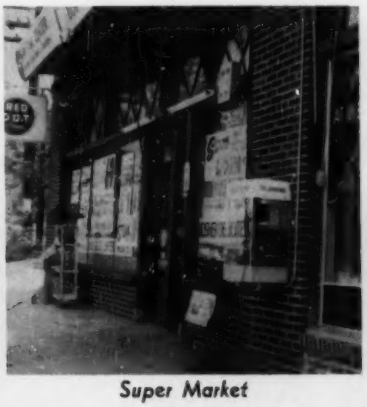
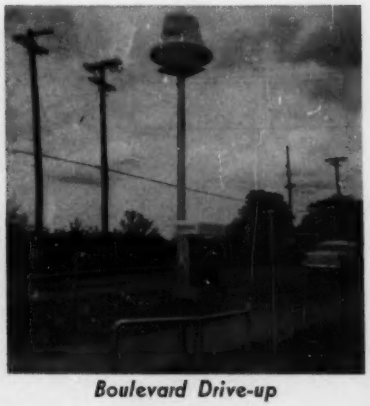


Super Market



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TELEPHONE companies are installing microwave to obtain additional toll circuits for several good reasons. Among them: (1) It is quick, easy and economical—(2) requires no right-of-way—(3) solves tough terrain problems —(4) is simple to maintain—and (5) highly reliable—more weatherproof than other facilities.

And experienced telephone people are choosing Lenkurt *Microtel!* That's because it's the most advanced microwave equipment on the market and the most flexible in design to meet future growth requirements. Consider the rate of toll growth and you'll see how important this is!

Simple plug-in units

With flexible Lenkurt 45BX Carrier, a system can be installed initially with only a few carrier channels. Then, as traffic increases, it can be expanded economically at will by the addition of more channelizing equipment or by paralleling transmitter-receiver assemblies.

All plug-in units of Type 74A Microtel are similar-to those in the famous "universal" Lenkurt 45-class equipment. This greatly simplifies maintenance.

Start small, if you wish, with as few as 4 to 12 channels. Later on you can add 12- or 24-channel groups on a stackable basis. A single *Microtel* terminal can accommodate up to 240 channels; and with r-f circulators, *as many as four systems can use the original antenna and antenna transmission line!* For complete information, send the coupon or call your nearest Automatic Electric representative.

Automatic Electric Sales Corporation
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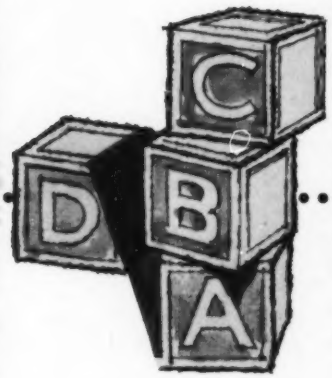

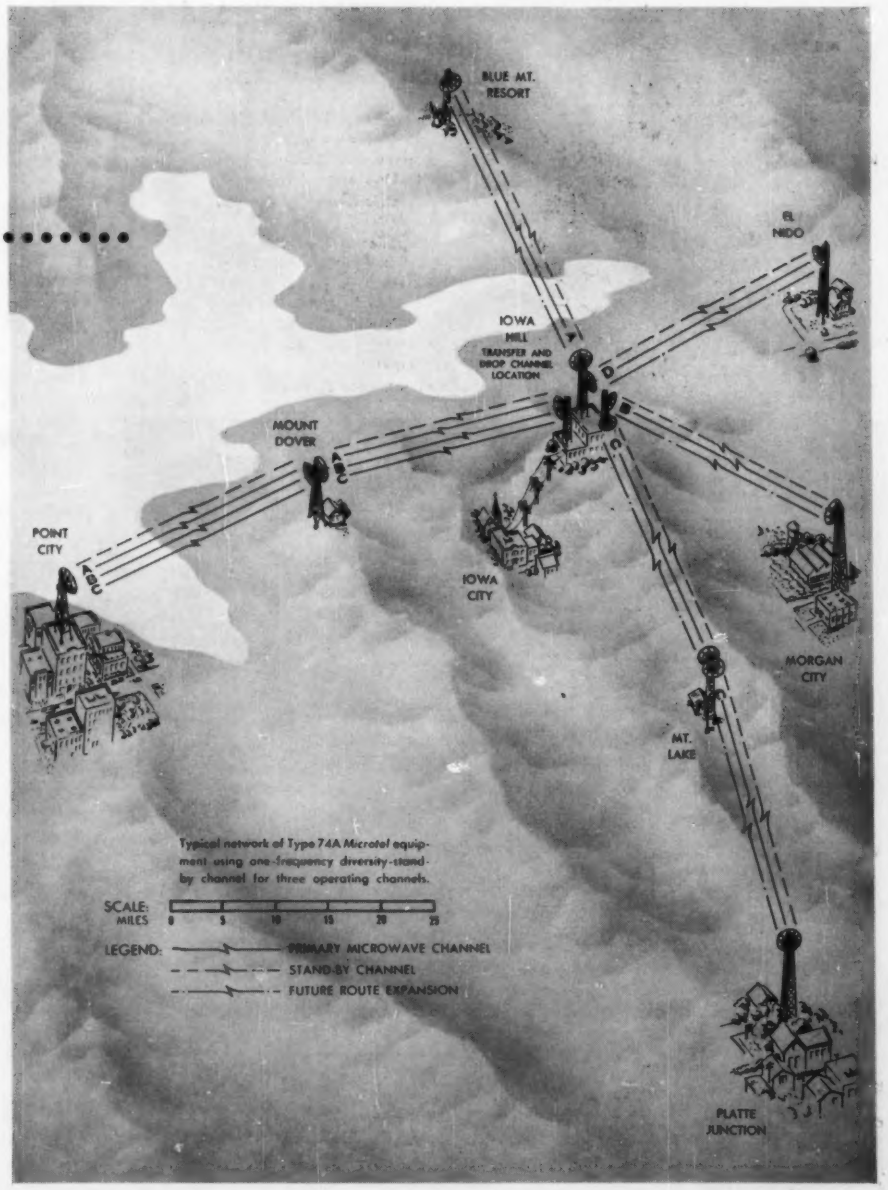

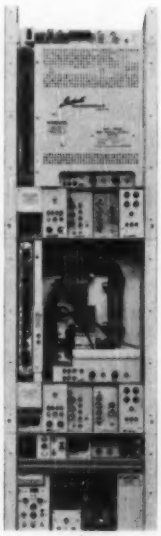

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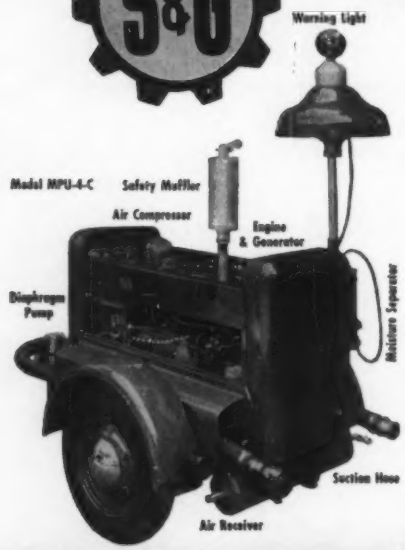

- **Generator (slow speed for quietness) 2500 Watt, 110-Volt DC**
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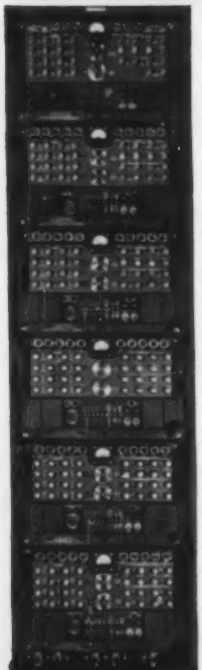

MINIATURIZED CARRIER TELEPHONE SYSTEMS FOR RADIO AND 4-WIRE CABLE

FOUR OR 24 CHANNELS

Two miniaturized voice-multiplex systems providing four or 24 voice channels over radio or 4-wire cable are available. They have many advantages over earlier designs: high performance, small size, light weight, low cost, circuit simplicity, low power requirements, small number of tubes of a single type only, low operating cost, low maintenance and high reliability.

These systems provide a voice-channel flat within 1 db from 300 to 3500 cycles, for each 4 kc of bandwidth occupied. Each channel is equipped with hybrid, signalling, and dialling circuits for all the standard 2-wire and 4-wire loop options.

The basic unit provides an order-wire and 4 carrier-derived channels. These units can be stacked in groups of 2, 3, 4 or 5 by means of a group modem to provide 9, 14, 19 or 24 channels. Full flexibility is provided for dropping and inserting channel groups at repeater and terminal points. Moderate lengths of 4-wire cable or open-wire line may be inserted between the multiplex equipment and the radio terminals.

24-channel carrier-telephone terminal complete with hybrids, ringing and dialling circuits, and test facilities. Dimensions are 58″ high, 16″ wide and 8″ deep. Power input 250 watts. Weight 326 lbs.

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New York Commission Grants Sale and REA Loan

The New York Public Service Commission on June 20 authorized Prattsburg Telephone Co., Inc., to acquire the system of The Caywood, Lodi & Valois Telephone Co., Lodi (TELEPHONY, Feb. 8, p. 28). The company was also authorized to purchase from Trumansburg Home Telephone Co. a switching line it now operates in territory served by the Caywood company.

The Prattsburg company was also authorized to borrow up to $619,057 from the Rural Electrification Administration (REA) with which to finance a plant modernization program. The authorization was by a four-to-one vote with Commissioners Benjamin F. Feinberg, Spencer B. Eddy, Francis T. Mylott and Aaron L. Jacoby approving and Commissioner Richard H. Balch dissenting.

Prattsburg now serves 1,095 subscribers. The Caywood company serves about 246 subscribers.

At a public hearing on the matter, officials of Prattsburg Telephone said that after the new properties are acquired they will be converted to automatic operation. The company's modernization program also calls for the complete conversion of its Prattsburg exchange to dial service.

In its original application, Prattsburg sought permission to borrow $723,000 from REA. The commission determined, however, that only $619,057 is required.

Southwestern Bell Receives Rate Increase in Texas

The Laredo, Tex. City Council has approved a request by the Southwestern Bell Telephone Co. for rate increases, it was reported on June 4.

Rates approved by the council are lower than those asked by the company. The rate changes are as follows:

	Old	*New*
One-party business	$10.00	$11.50
One-party residence ...	4.50	5.40
Two-party residence ...	4.00	4.25

The company had asked $12 for one-party business and $5.60 for one-party residence service.

Unchanged is the $3.50 rate for four-party residence service which is being eliminated as soon as possible.

Rate Boost Denied in Ga.

The Georgia Public Service Commission recently denied the rate request of the South Georgia Telephone Co., Sylvania. The commission's decision stated, "It is ordered further that until such time as South Georgia Telephone Co.

submits an acceptable depreciation study to support individual detailed rates, depreciation shall not be accrued by the company in excess of a 4 per cent composite rate applied to depreciable plant in service."

N. C. Company Asks Raise To Cover Expansion Loans

The Pinebluff Telephone Co. on June 19 petitioned the North Carolina Utilities Commission for permission to increase rates.

In its petition, the company said that an expansion program now under way is costing more than was expected and that the company would need more than the $161,000 it already has borrowed to complete the program. The increased rates, it added, would be used as the basis for further loans.

The proposed new rates range from $9.00 for one-party business service and $5.50 for one-party residence to $6.50 for multi-party business and $4.50 for residence multi-party service.

IN THE NATION'S CAPITAL

Continued from page 19

can be stacked up against the corresponding obligation of the regulated utility company.

As you all know, the utility company must serve without discrimination every one who desires service and is willing to pay for it. The utility company may not change its level of rates for such service without first obtaining permission from a specialized regulatory board, usually the state public service commission.

From such elementary discussions the company publication can proceed to the principles which underline every rate case. The fact that rates must yield a sufficient return, over and above operating expenses, can be expressed as a hypothetical problem.

Take a round-figure rate base of one million dollars as the value of a company's property devoted to public service; multiply that rate base by a 7 per cent return or whatever the company contends should be allowed; add a hypothetical round figure for operating expenses, broken down into payroll, taxes, depreciation, etc.; and then ask the reader to work out for himself how much revenue the rates must yield in order to cover the required amount. This can be made a sort of puzzle game.

But, of course, it is more effective if it is tied in (as a follow-up story perhaps) with the over-all statistics of the company's actual operation. A story on this would show how much present rates provide and how much

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POW-R-SPADE narrow trenches cost 1c to 5c per foot including labor.

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Saves 80% - 90% cost and time compared to subcontract or hand digging.

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Ready to go on the job, at once — no costly waiting around.

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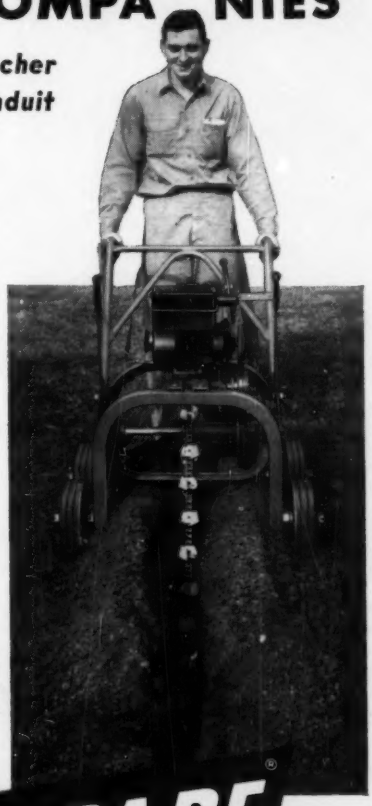

POW-R-SPADE digs a neat 3" wide trench. Dirt is delivered well pulverized on each side of trench — no lumps or clods. Easy to back fill.

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WE ADMIT that these are strong statements. And yet, POW-R-SPADE users confirm them again and again. For here is a machine that is ideal for trenching 3" wide to 24" deep, where larger machines are costly and impractical; where hand labor is slow and expensive. No heavy wheel marks or unnecessarily wide trench to scar lawns. Digs right up to foundation of building. Goes 1½ to 17 feet per minute, depending upon soil conditions.

A rugged machine. Easy to set and to operate. Oil-sealed bearings. Powered by a well-known engine. Minimum maintenance. Shipped completely assembled, ready to go to work for you. Additional interesting details and information immediately yours upon return of the coupon.

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actual operating expenses require—broken down into payroll and other items.

Multiplying the company's actual rate base figures by the return percentage would yield the over-all revenue requirements. By subtracting the present, rate-level yield from the total revenue requirements, the remainder is the amount of the rate increase. Simplicity is the keynote here. There is nothing really difficult or involved about the bare mathematics of a rate base, if unnecessary detail or controversial items are avoided or curtailed.

Effects on Employes

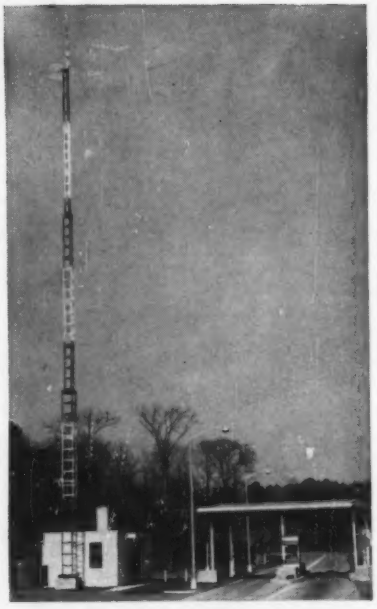
Presenting the story of the basic justification for a company's rate case in this manner serves two purposes. First, it educates the employe to the need for the rate increase. It makes him a potential ambassador of good will in explaining that need to his friends and acquaintances whenever the subject arises in conversation.

Secondly, it enlists his active support and sympathy for the company's objectives because it *tends to identify the employe's self-interest with the company's interest in obtaining sufficient revenues to make the enterprise successful.* The employe readers of any company publication know that they have a community of interest with the company's welfare. So, it should not be difficult to stimulate their interest in their company as a successful enterprise. Certainly, nobody wants to be associated with an *unsuccessful* enterprise.

Stories like this can go a long way toward rooting out wrong ideas which stubbornly persist among company employes. You know the old grapevine fallacies about the company making 25 per cent, or some such fantastic profits, or that the profits equal the payroll or the taxes, instead of being only a small fraction of either.

A 6 per cent return, for example, is surely not an excessive profit these days. It is something an employe can understand in terms of his own affairs. He may be paying that much on a house mortgage. And if he is paying for an automobile on the instalment plan, he is probably paying a great deal more by way of interest on his unpaid balance. So, the rate case gives the company editor a real opportunity to brush away a lot of cobwebs and set things straight once and for all in a good many employes' minds.

Finally, there is the question of the actual trial of a rate case and how a company publication should treat it in its coverage. As far as a blow-by-blow description of testimony, especially expert testimony, there is a risk of losing reader interest. Let us face it, the mechanics of a rate case are not exciting. After the objectives and justification of a company's rate case have been set forth, it seems to me the safest course for a company editor to follow is to play it straight and keep it short and simple.



Communication's Most Versatile Tower . . . the STAINLESS "SC" (Self-Supporting)

- Clean, economical, dependable structure
- Serves many purposes
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Quick, expeditious handling of communications is assured year-'round by this clean, economical and dependable self-supporting structure.

The SC Tower is sturdy, and being free of guy cables is particularly adaptable where land space is at a premium.

Available as straight uniform cross-section for short heights, graduated uniform cross-sections for taller use.

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NORTH WALES • PENNSYLVANIA

In order to stimulate the company's 1958 sales of color telephones, the Northern Ohio Telephone Co., Bellevue, arranged for telephone exhibits in the windows of local business establishments. The above display was placed in a window of the People's Bank at Oberlin, O. The exposition, labeled the "Evolution of the Telephone" exhibited old instruments at one end, cables of various types in the center, and color telephones at the opposite end. At the beginning of 1958, the Northern Ohio company established a quota of color telephones for each of its exchanges and a total of 2,400 for the system. In the first five months of 1958, Northern's employes sold 1,422 color sets or 59 per cent of the 1958 quota. Two of the company's inspectors sold 116 sets during this period and two cashiers sold 85 more color telephones. All inspectors carry a color telephone in a plastic case when they call at a home or business.

Arguments of rate case protestants might be summarized by way of objective coverage. But the temptation to editorialize at this stage of the rate case might well be resisted until there is a final decision. I am speaking now of a contested case in which a trial and decision are necessary. Some rate cases are not contested, but they are becoming all too rare these days.

When the rate case has been tried and decided, the company editor sometimes has a problem of what to do about the result. In a typical situation the company may get only one-half or three-fourths of what it asked—in the way of an increase. Should the editor hail the result as satisfactory, or deplore the ungranted relief?

Most editors will naturally take their cue from the reaction of management in this situation. But it is important to impress upon employes how management feels about the result, so that the employes, in turn, can project the company's position. The same thing goes for stories about court appeal, if any.

Financial Publicity

Now for the financial story. I find I have talked so much about the rate case that there is not too much time left for covering publicity about financial operations as such. I do not justify this by any slighting of the importance of the financial operations. On the contrary, I think, as I said earlier, both financing and rates are equally important and both are as essential to the well-being of a company as your right eye compared with your left eye.

But I think you will agree that much of what I have said about rate case publicity can be also applied to the financial operation. That goes for timing, advance preparation, taking the employes into the confidence of the company, and explaining why financial operations are necessary. In addition, there are just a few specialized financial aspects which I will endeavor to cover briefly.

What I have missed most in financial stories in company publications I have checked over—and I have checked over a good many in the utility field—are the stories themselves. Those in charge of some company publications just do not seem to think that company financing is within their editorial range at all. Maybe there is a managerial reason for this. But offhand I would be inclined to say that any company which overlooks the magnificent opportunity which a financial operation presents, to explain the economics of its corporate structure to the employes, is missing a mighty good thing, and a very important thing.

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The Unique Kellogg Volunteer-Fire-Call System

Adaptable To Any Type Community Dial Offices

No duplication of facilities! The Kellogg *Volunteer-Fire-Call System* is as dependable as your present phone system because it uses existing lines and phones. No special servicing—no failure because of long periods of disuse.

- **No restriction as to ringing frequencies on party lines.**
- **Works with any type of equipment.**
- **Automatically rings up to 10 firemen from originating call.**
- **Identifying . . . continuous ring.**
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- **Proved reliable through years of continuous service.**
- **Easy universal wall mounting. Compact size 40" x 18" x 10¼".**

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Take, for example, the mere description of a company's securities. How many employes in a typical company are able to define, in reasonably accurate terms, the difference between a share of common stock and a share of preferred stock and a mortgage bond or a debenture bond?

If you have not already tried that out on your own rank and file, just take a sample some time and see what happens! I warn you in advance you had better be prepared to have your hair curled at the amount of misinformation, or the lack of understanding, which exists in this area.

I know of an actual case, in which, several years ago, the management of a very large telephone company tried that very test on its employes and the results were so disturbing that it tried the same test on some of the company's junior officers. The results there were even more disturbing. This company did something about that fast!

Eliminating Confusion

One other important point about the financial story is that it creates an opportunity for clearing up confusion in the employes' minds about the difference between *management* and the *owners* of the property and the *creditors* of the company.

These are three distinct groups. But there is a tendency among employes to mix them all up together. If you do not think so, just ask the first 20 or so employes leaving the downtown office building of any utility company. Ask them who owns the company. Some of them will name the president of the company. Some of them will recite the list of officers. Some of them may be honest enough to say that they just do not know.

It is quite likely that only a few will correctly identify the actual owners of the company *with the common shareholders.*

So when you have a financial operation, here is a chance to explain not only what a bond is, but the fact that the bondholder is simply a creditor of the company just like any other creditor, from whom the company has borrowed some money which it has to pay back some time, along with periodical interest in the meantime.

Employes understand that, because that is the way their own house mortgages work. It can be explained how the bondholder has no right or control over the operations or policies of the company, and no interest in it other than the repayment of his loan with interest at the maturity date.

Likewise it can be explained how the shareholders are people who invest in the actual *ownership* of the company, who take the risk, and whose majority decisions are binding on management.

Finally, it can be explained how the *management*, from the president on down, is simply the hired help (or the expert crew, if you prefer a more complimentary description) whom the shareholders have engaged to operate the corporation's business successfully and profitably.

I must confess that I have never seen a statement about this simple distinction between a company's creditors, a company's management, and a company's owners worked out in any financial background story in a company publication. Yet, how important it is in the relationship between management and employes!

How important it is to have the employes understand who the real owners are, and that there are limits to what management can do for the employes in the exercise of management's stewardship on behalf of the shareholders.

It goes without saying, of course, that the financial story creates the obvious opportunity for a discussion of the company's corporate structure and its assets and its outstanding securities of various classes. Where a new bond issue or new stock issue is being floated to build a new plant or enlarge an old one, any editor will naturally write about plant growth and the promise of future business (or see that somebody writes it) if he is going to have a financial story at all. Where the company is a large one, such a story might well give the facts as to the number of stockholders, where they live, how many are men, and how many are women. All this makes interesting personality copy.

And where the policy of management is to encourage employe investment, it is almost an editor's duty, in such financial stories, to present an analysis of how rewarding such investment has been to security holders in the past, how much they cost, how they can be obtained, and what the outlook is for the future.

Going back to the basic question asked of me in this talk—what are we missing in our financial and rate case stories—I would summarize briefly on the basis of what I have actually seen in company publications; first, I think such stories often do not start early enough to accomplish the important function of preparing the employe's opinion and enlisting his sympathy in advance of the company's formal announcements.

Secondly, I would say that more

coverage in the form of a number of short and simple stories is preferable to one or two long stories which may be missed entirely. It is to the company's advantage to keep the employe familiar with what is going on and why, even at the expense of repetition.

Finally, I would say that every rate or financial story presents an opportunity, so often overlooked in company publications, to educate the employe on what makes the economic wheels go 'round in the company's operation, and to identify such events with his own self-interest in the company as a successful enterprise.

Nationwide Dial System Set for Australia Soon

Australia will soon have an all-number dial telephone system it was reported on June 2. The all-number 7-digit system, according to the Postmaster General's Department, is being introduced to pave the way for a fully-automatic national dialing system.

Cronulla, a suburb of Sydney, is already using the new system. Brisbane and Perth will receive new all-number directories in August.

The Australian numbering system will consist of a 3-digit prefix and a 4-digit subscriber's number. It was stated there are not enough combinations of the 2-letter prefix system to allocate to urgently needed new exchanges, so the 3-digit prefix will be used in Melbourne and Sydney almost immediately.

Kellogg Names Regional Sales, Engineering Heads

J. O. Smith has been named division sales manager of the western region of Kellogg Switchboard & Supply Co., a division of International Telephone & Telegraph Corp. His headquarters are at Burlingame, Cal.

Mr. Smith's appointment was announced recently by George T. Scharffenberger, Kellogg's president.

In his new position, Mr. Smith directs all sales activities of the company in the eight states of the western region which includes California, Oregon, Washington, Montana, Idaho, Utah, Nevada, and Arizona, plus Alaska, Hawaii, and British Columbia.

This region is one of six recently established under Kellogg's decentralization program.

Mr. Smith joined Kellogg six years ago. He previously had been employed as a salesman at Spencer Chemical Co., Dallas, Tex.

A native of Baytown, Tex., he attended Lee Junior College there before

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going to Sam Houston State College in Huntsville, Tex. He served in the Army from 1948 to 1951.

In other appointments, Hal A. Skutley was named north central regional engineer of the Kellogg company.

In his new position, Mr. Skutley is responsible for engineering coordination between field projects and manufacturing in the nine states of the north central region which includes Illinois, Indiana, Michigan, Minnesota, Montana, North Dakota, South Dakota, Wisconsin, and Wyoming.

The regional engineer has been employed by Kellogg since June, 1950. He formerly managed three exchanges of the Southeastern Telephone Co., Tallahassee, Fla.

A veteran of five years service with the U. S. Army during World War II, Mr. Skutley became inside plant manager of the Signal Corps facility at Fort Benning, Ga.

He began his career as an electrical inspector for Western Electric Co. in Chicago.

R. B. Wiseman Joins Henkels & McCoy

R. B. Wiseman will join Henkels & McCoy as of July 1 as manager of systems engineering and equipment installation, according to an announcement by Paul M. Henkels, communications division manager.

R. B. WISEMAN

Mr. Wiseman will direct all activities pertaining to engineering and installation of communications equipment and will make his headquarters at the company's Elkhart, Ind., office.

Mr. Wiseman has been associated with the North Electric Co. for 30 years. During this time, he worked on switchboard production, as equipment installer, equipment engineer, and sales manager.

For the last five years, he served as manager of North's telephone division. In this capacity, he directed all sales, engineering, installation, and service activities.

F. Thomas Winder To Sell Holan Trucks, Equipment

F. Thomas Winder is presently selling Holan truck bodies and associated power equipment in Texas and Oklahoma.

F. THOMAS WINDER

Mr. Winder joined Holan Corp. of Georgia after serving as sales manager for Artificers, Inc. Prior to that, he was a sales representative for McCabe-Powers Auto Body Co. and managed a wholesale store.

He is a graduate of the University of Toledo, 1951.

Exide Adds Regional Stations, Names Supervisor

Exide Industrial Division of The Electric Storage Battery Co., Philadelphia, has announced a planned expansion of its system of regional service stations and warehouses, as part of an over-all program to provide customers with improved service on industrial battery products.

The new post of supervisor of service stations and warehouses has been created in the division's service engineering department for the purpose of spearheading the national program. Charles L. Eberhardt Jr., former manager of Exide's Boston depot, has been appointed to the post.

Conversion of former manufacturing depots in Boston and Detroit for use as industrial battery service stations was a first move in the program.

Plans call for the addition of service station facilities in other key-cities, to provide more immediate service and to inventory larger stocks of batteries,

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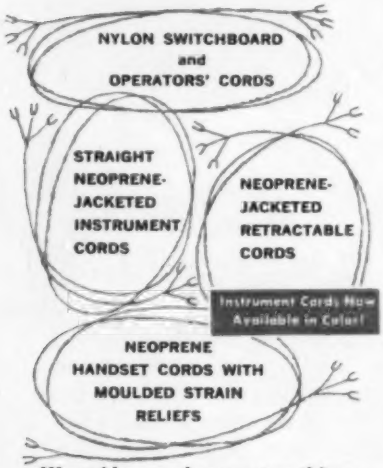
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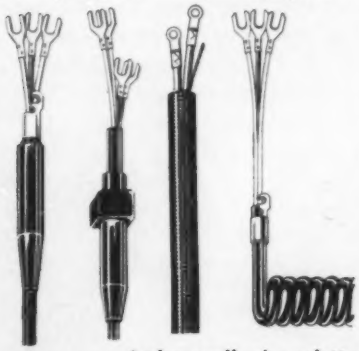

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The stations also will stock and service battery charging equipment. Chargers for Exide distribution are made by the Electric Products Co. under a recently announced agreement.

The recently converted Boston service station and warehouse is at 100 Ashford St. The nearly completed Detroit service unit is at 8051 W. Chicago Blvd.

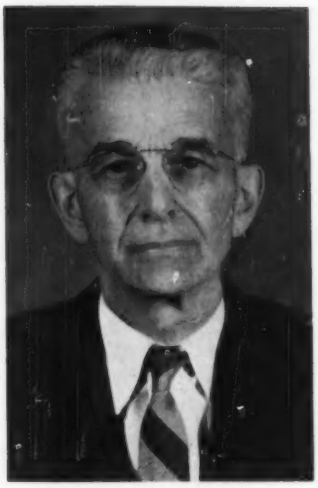
Mr. Eberhardt, the new supervisor of service stations and warehouses, has been with The Electric Storage Battery Co. for more than 30 years. He started in 1928 as an order clerk in the production department of the old 19th St. and Allegheny Ave. plant, in Philadelphia. By 1956, he was assistant supervisor of battery manufacturing schedules at the new Philadelphia plant.

In 1956, he transferred to the Boston depot as assistant to the manager. He became manager there in 1957, directing conversion of the depot to a service-station warehouse.

While working with the company in Philadelphia, Mr. Eberhardt studied electrical engineering at the evening school of Drexel Institute of Technology. He was born in Wilmington, Del., and had his preparatory school training at Port Deposit, Md.

G. L. Ferguson Retires From Automatic Electric

George L. Ferguson is scheduled to retire on June 30 from his position as manager of supply sales operations with Automatic Electric Sales Corp. at Northlake, Ill., after more than 28 years with the Automatic Electric organization.



G. L. FERGUSON

Prior to his service with the manufacturing subsidiary of General Telephone Corp., he worked for several different manufacturing organizations and served overseas in World War I with the 306th Field Signal Battalion.

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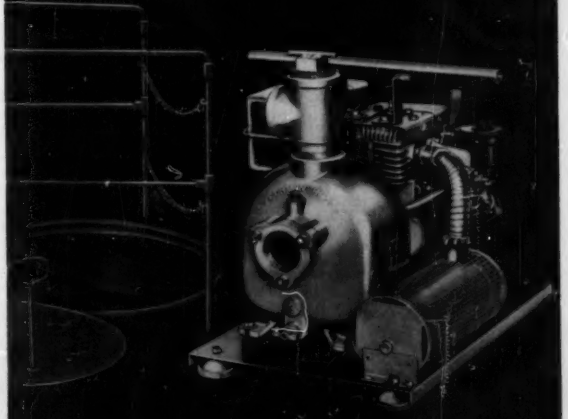

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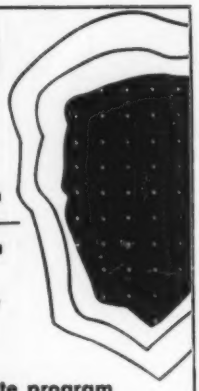

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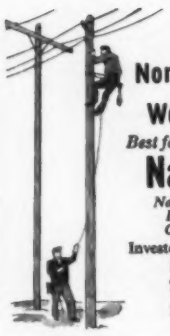

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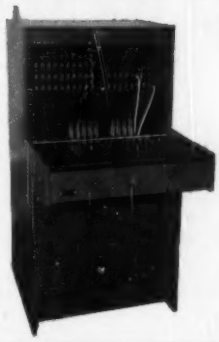

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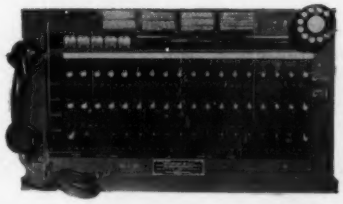

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